POSTER PRESENTATIONS – FULL TEXT

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PP-1: A Case Report of Eosinophilic Granulomatosis Polyangiitis (EGPA) Presenting with Foot Drop

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Eosinophilic granulomatosis with polyangiitis (EGPA) is a rare systemic necrotizing small-vessel vasculitis (AAV) accompanied by asthma, eosinophilia, and eosinophilic inflammation of various tissues including the peripheral nerves. Herein, we reported a case of EGPA presenting with drop foot.

CASE REPORT

A 37-year-old male patient, diagnosed with asthma for 4 years, applied to the emergency department with complaints of shortness of breath, numbness in the right foot, and weakness. There were bilateral multiple infiltration areas in the thorax computed tomography (**Figure 1**). COVID-19 PCR test was negative. The patient was hospitalized for further examination. Bronchoalveolar lavage showed alveolar macrophages, eosinophils, and neutrophils, some of which were degenerated. Laboratory tests revealed hemoglobin: 14.9 g/dL, WBC: 17500/µl, neutrophil: 7200, eosinophil: 8100, platelet: 220000 /µl, creatinine: 0.74 mg/dL, AST: 40 U/L, ALT: 46 U/L and CRP, 142.6 mg/L. There was no proteinuria and the urine sediment was inactive. ANA, ENA, and ANCA tests were negative. Electromyographic examination revealed electrophysiological findings consistent with axonal degeneration in the common peroneal branch and tibialis posterior branch of the right sciatic nerve. A diagnosis of EGPA was made with a history of asthma, increased acute phase reactants, marked eosinophilia, multiple lung infiltrations and peripheral neuropathy. 1mg/kg/day methylprednisolone and intravenous cyclophosphamide(CYC) treatment were started. Clinical and biochemical response was obtained during follow-up. The patient's respiratory symptoms regressed and the dorsiflexor muscle strength of the foot increased with the simultaneous physical therapy program.

DISCUSSION

Peripheral neuropathy (PN) is a prevalent and important manifestation of EGPA[1]. Diagnosis of EGPA is difficult especially when PN is the initial symptom. Pathological findings of vasculitic neuropathy are characterized by axonal degeneration of nerve fibers caused by vasculitis-induced ischemia [2]. In the largest published series of patients with EGPA, 51.4–60% had peripheral neuropathy at presentation. Mononeuritis multiplex was slightly more common than symmetric polyneuropathy, and the lower limbs were predominantly affected [3]. Our patient had right drop foot. The ANCA test of our patient was negative, and less than 40% of patients with EGPA had positive ANCA test. Steroids are the mainstay of treatment in EGPA [1]. Adding CYC to the treatment may reduce recurrence, morbidity, and mortality in the presence of multiple organ involvement. A good clinical and biochemical response was obtained in our patient with steroid and CYC treatment.

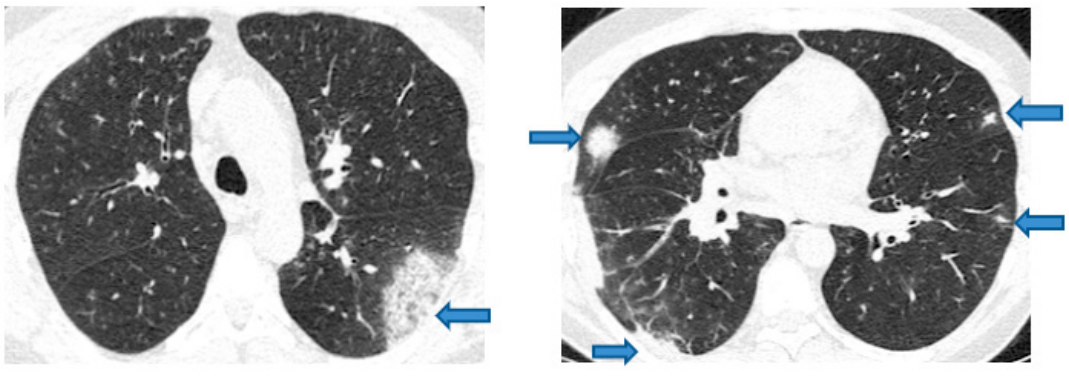

Figure 1: Multiple infiltration areas in the HRCT of the patient

KEY MESSAGE

- *Vasculitic processes should also be kept in mind in patients presenting with drop foot.*

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PP-2: Eosinophilic Granulomatosis with Polyangitis Presenting with Myocarditis

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Eosinophilic Granulomatosis with Polyangiitis(EGPA) is a small and medium vessel vasculitis characterized by eosinophilic infiltration of organs with necrotizing vasculitis and interstitial and perivascular granulomas. Three phases have been described in the natural history of the disease (prodromal, eosinophilic, and vasculitic phases) although they do not always occur successively [1].

Usually the patients' age range is between 20 and 40 years, and both men and women are equally affected. The etiology of EGPA still unknown, but it has been attributed to hypersensitivity to an inhaled agent. Rarely a parasitic infection or antigenic drug for desensitization represents a triggering event. Asthma is the main characteristic of this syndrome. Lungs are the organs most frequently involved, followed by kidneys. Pulmonary hemorrhage and glomerulonephritis are much less common than in other small vessels vasculitis [2].

CASE REPORT

In 2018, when she was 18 year-old presented in a few-weeks history of pain and petechial rash on both legs. For the past one week, she had low back pain radiating to left lower limb and weakness of the left foot. She was diagnosed with astma 8 months ago and receving inhaler treatment. A diagnosis of EGPA was made because of astma, eosinophilia, displaced pulmoner infiltrations **(Figure 1)**, tissue biopsy compatible with vasculitis and polyneuropaty. In 2020, when she was 20 year-old, she admitted to our rheumatology department with acute respiratory distress and severe chest pain. Initial laboratory findings revealed Troponin I elevation: 0.89 µg/l (reference value <0.01 µg/l), ck-mb: 15ug/L,white blood cells(WBC): 5,100/µl, platelets: 298,000/µl, hemoglobulin (HBG): 10.1g/dl. C-reactive protein (CRP) level was 137 mg/dL. Electrocardiography revealed sinus bradycardia. Transthoracic echocardiography (ECHO) revealed a dilated hypokinetic left ventricle (left ventricular ejection fraction (EF)~40%) with mild segmental abnormalities in the septal and apical segments. Mild pericardial effusion was present.

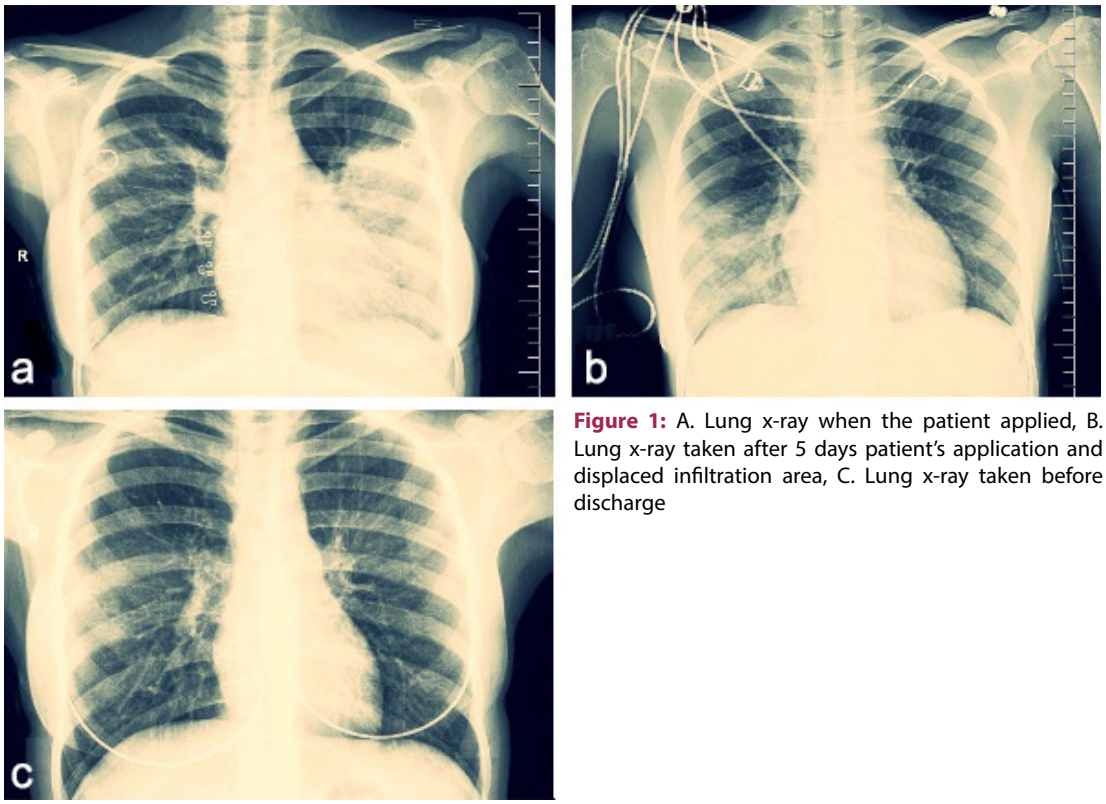

Figure 1: A. Lung x-ray when the patient applied, B. Lung x-ray taken after 5 days patient's application and displaced infiltration area, C. Lung x-ray taken before discharge

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Serum troponin I level was increased to 1.30ng/mL, CK-MB 32IU/L, aspartate transaminase 55 IU/L, lactate dehydrogenase 606 IU/L, CK-MB 32IU/L. The patient was transferred to the intensive care unit for further diagnosis and treatment. Beta blocker treatment was discontinued. Coronary CT angiography was normal. She was diagnosed with myopericarditis. We gave 500 mg methylprednisolon for 3 days, then we continued as 40 mg daily and 1000 mg rituximab treatment. Intravenous immunoglobulin (IVIG) was given at a dose of 400 mg/weight/day for 5 days. After the treatment troponin I and ck-mb decreased. Chest pain and shortness of breath improved. Pericardial effusion regresssed in control ECHO, EF: %50. Lung consolidations regressed after the treatment. She was followed up in the servise for four weeks. We gave 40 mg methylprednisolone for 1 month and then tapered, on day 15 received second dose of rituximab treatment.

DISCUSSION

In the long term this systemic vasculitis has a 90% 1 year survival and a 62% 5 years survival, without treatment the survival is significantly diminished with 5 year survival being only 25% [3]. Relapse is common, and long-term steroid therapy is often required. Relapse can be myocarditis in EGPA due to the high morbidity an mortality, close follow up and early intervention is required.

KEY MESSAGE

- *Our case presents cardiac involvement in EGPA. We recommend that pay attention to diagnosis and early treatment.*

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PP-3: A Case of Granulomatosis with Poliangiitis (GPA) Presenting with Joint Pain

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Anti-neutrophil cytoplasmic antibodies (ANCA) -related vasculitis (Granulomatosis polyangiitis (GPA), microscopic polyangiitis (MPA), eosinophilic granulomatous polyangiitis (EGPA)) are immune-mediated, progressive, necrotizing vasculitis with small vessel involvement. Lung and kidney involvements are associated with mortality. The most common presentation in GPA can be multisystemic involvement such as upper respiratory tract, eye, lung, renal and joint. Symptoms and signs of granulomatosis polyangiitis might include; crusts in nose, stuffiness, sinus infections and nosebleeds, coughing sometimes with bloody phlegm. It may sometimes present with joint symptoms similar to rheumatoid arthritis. Corticosteroid and immunosuppressive treatments are used in GPA treatment [1].

CASE REPORT

26-years-old female patient who is a doctor, presented with weakness, fatigue and pain in the great joints of the lower extremities six months ago. No pathology was detected in the laboratory and physical examination of the patient who applied to the internal medicine outpatient clinic. Meanwhile, the patient had no lung symptoms. There were only arthralgia symptoms. The patient was followed up with the present findings. The patient was referred to rheumatology because her complaints didn't regress. The patient was evaluated by rheumatology. Physical examination was unremarkable except for arthralgia. Laboratory examination was planned. Leukocyte (7.8x103 / µL), hemoglobin (13gr/dL), platelet (322x103 / µL), BUN (4.7 mg/dL), creatinine (0.7 mg/dL), AST (26 U/L), ALT (20 U/L), creatine kinase (120 U/L), anti-nuclear antibody (ANA) negative, dsDNA negative, rhematoid factor (RF)<20, IG G (10.8 g/L), IG A (0.7 g/L), IG M (1.5g/L), ESR (35 mm/h) and CRP (36.1 mg/L) were present in the laboratory examination. Proteinuria and hematuria detected in urinary analysis. The amount of proteinuria in 24-hour urine was 1500 mg/day. PR3-ANCA and c-ANCA (IFA 1/100) were detected positive. During the follow-up of the patient, hemoptysis developed in the amount of half a tea glass several times. Thorax computed tomography was performed in the patient. Nodules of ground glass density were detected in thorax computed tomography. Bronchoscopy was performed and endobronchial lesion was not detected in bronchoscopy. Renal biopsy was performed and the result was reported as necrotizing crescentic glomerulonephritis (pauci-immun). The patient was diagnosed with GPA. Plasmapheresis was performed three times and pulse steroid (1000mg/d) was given for 3 days. Then the steroid dose was maintained as 1mg/kg/day. There was no hemoptysis in follow-up and rituximab (RTX) 375 mg/m2/week was planned for 4 weeks as induction therapy. The steroid dose was tapered gradually. After the first RTX treatment, proteinuria regressed to 180 mg/d. The patient was given third cycle rituximab and there is no clinic finding.

DISCUSSION

GPA is a mortal disease in untreated cases, therefore diagnosis and treatment should not be delayed. As in our patient, it may present initially with only consitutional symptoms. In nonspecific complaints such as arthralgia, it is necessary to perform laboratory examination together with the systemic examination and to keep in mind diseases such as GPA. Constitutional symptoms may occur several months before the diagnosis of the disease. Lung symptoms are common in GPA, and thorax CT may show ground glass, cavitation and nodular lesions. Also, rhinitis, sinusitis, otitis or septal perforation and nasal collapse (wegener's saddle nose) may cause. People with GPA who have critical organ involvements are treated with corticosteroids combined with another immunsupressive treatment such as cyclophosphamide or rituximab (RTX) [2,3]. İn patients who have less severe GPA, methotrexate and cortiosteroids can be used initially [4].

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KEY MESSAGE

- *We should keep in mind other alternative diagnoses in patients with joint pain. We must carefully review their systemic examinations.*
- *GPA can present with arthralgia/arthritis*

Kaynaklar

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PP-4: Little Known Aspect of Microscopic Polyangiitis; Interstitial Lung Disease

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Introduction; Microscopic Polyangiitis (MPA) is type of systemic nectotizing vasculitis, predominantly affected small calibre vessels and is associated with presence of antineutrophilic cytoplasmic autoantibodies (ANCA). The organs most common affected in this type of vasculitis are the lungs and kidneys. The common presentation of pulmonary involvement in MPA is usually pulmonary capillaritis and alveolar hemorhhage. However, it has been reported that MPA may rarely occur as interstitial lung disease (ILD) and even without other systemic findings [1]. Herein, we present a case of MPA presenting as ILD.

CASE REPORT

A 63 years old female patient applied to the Chest Diseases Policlinic in an external center with the complaint of dry cough that started 5 months ago. Computed tomography of the thorax showed bilateral ground glass opacities and traction bronchiectasis in the lower zones of the lungs, and a diagnosis of ILD was made. She was referred to our clinic when detected an increase in kidney function tests in her laboratory tests. She had constitutional symptoms such as fatigue and weight loss, hemoptysis and other systemic findings were absent. Physical examination revealed fine crackles bilateral mid and lower zones of lungs, vital signs and other systems were normal. In laboratory tests; urea; 82 mg/ dl, creatinin 1.94 mg/ dl, normocytic normochromic anemia in complete blood count, CRP 113 mg/L, ESR 90 mm/h. In urine we observed proteinuria (1.4 gr/ day in 24 hours urine test) and erythrocytes (5 cells/ hpf). Proteinase 3 ANCA was negative, Myeloperoxidase (MPO) ANCA was positive (161, normal value 0-12). Renal biopsy revealed cellular crescent in 4 of 34 glomeruli, fibrocellular crescent in 12 and fibrinoid necrosis in 2 glomeruli. The patient was diagnosed with MPA, pulse steroid and pulse cyclophosphamide treatments were initiated.

DISCUSSION

It is known that ILD can be seen in ANCA associated vasculitis (AAV). In AAV, ILD is more common in patients with advanced age and MPO-ANCA positive MPA [2]. Although rare, ILD may also be first sign of MPA.

KEY MESSAGE

- *MPA is among the possible causes while intestigating the etiology of ILD.*

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PP-5: Granulomatosis with Poliangiitis (GPA) Case Presenting with Recurrent Conjunctival and Postnasal Discharge

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Granulomatous with Polyangiitis (GPA) is a rare systemic autoimmune disease of unknown etiology. It is characterized by granulomatous inflammation, tissue necrosis and varying degrees of vasculitis in small and medium vessels. It can manifest itself with varying severity and wide clinical symptoms. It has two forms. The limited form is characterized by upper and lower respiratory tract involvement without renal involvement. In the systemic form, it can involve other organs, along with a more severe respiratory and kidney disease. Ocular and orbital signs can be found in approximately half of the patients with GPA and as the first presentation sign of the disease. It may be the result of disease in the neighboring paranasal sinuses or may occur focal with orbital granuloma formation, vasculitis.

CASE REPORT

A 55-year-old female patient was followed up by an ear-nose-throat physician with complaints of postnasal drip for 6 months. Chronic dactriocystitis and episcleritis were found in the patient who was evaluated by the ophthalmology department with the addition of conjunctival discharge to his complaints. Orbital MRI revealed a heterogeneous mass of 25x12 mm at the left lacrimal gland. C-reactive protein: 97 mg/dl, erythrocytesedimentation rate: 97 mm/h in the examinations, when we evaluated her. No other abnormality was found in the systemic evaluation and examination. Biopsy taken from the mass in the eye excluded malignancy and infiltrative infections, but was insufficient for GPA. ANCA (indirect immunofluorescence) was negative. Working with ELISA, PR3 ANCA was positive (+++). The BVAS-WG score of the patient who was accepted as GPA was 4. We started to the patient 1 mg /kg/ day methylprednisolone and 15 mg/week methotrexate for treatment. Methotrexate was stopped and azathioprine was switched to the patient whose liver tests increased. Azathioprine was discontinued in the patient whose liver tests did not improve. BVAS-WG activity of the patient who was found to have proptosis, ptosis, limitation of gaze in all directions, conjunctival hyperemia and episcleritis was calculated as 10. 1 mg/kg/day methylprednisolone + rituximab (RTX) 1000 mg every 6 months with 2-week intervals was planned. The patient is still being followed up with RTX therapy in remission.

DISCUSSION

In the presence of clinical findings, it would be beneficial to request PR3-ANCA and MPO-ANCA tests performed by ELISA in cases with high suspicion of ANCA-associated vasculitis, especially if the pathology is not guiding, although the ANCA screening test is negative.

KEY MESSAGE

- *In the presence of clinical suspicion, PR3 and MPO-ANCA ELISA tests may be helpful even in the case of negative ANCA screening test.*

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PP-6: Prostate Abscess: A Rare Clinical Prezentation for Granulomatosis Polyangiitis

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Granulomatous with polyangiitis (GPA) is a necrotizing granulomatous vasculitis with constitutional findings, often with respiratory and renal involvement. However, although it is rare, urogenital involvement can also be seen. Here, we present a case of GPA with lung, prostate, eye and soft palate involvement, whose initial presentation was a prostate abscess.

CASE REPORT

A 44-year-old male patient who applied to the urology clinic in an external center with the complaint of urinary burning and frequent urination revealed high ESR and CRP, hematuria and pyuria. The prostate gland of the patient, who underwent lower abdominal computed tomography, was observed as hypodense and was found to be compatible with a prostate abscess. When the sample taken in the transureteral resection performed after antibiotherapy was evaluated in the pathology, the result was "Necrotic fibrinoid exudate". During this period, the patient was transferred to internal medicine intensive care because of respiratory distress and hypoxia. In the thorax computed tomography performed for respiratory distress, cavitation areas up to 6 cm in size, nodular lesions, soft tissue lesions adjacent to cavity areas were observed. The cavities were thought to be metastatic lung abscess in the foreground and aspiration was made for diagnosis, and the pathology result sent from the sample came in accordance with the suppurative abscess. Due to the development of a perforated lesion on the palate during the follow-up, the patient was referred to Çukurova University Faculty of Medicine Internal Medicine Intensive Care with a pre-diagnosis of vasculitis and the arrangement of the examination and treatment. On admission to our hospital, the patient had a cavitary lesion on the palate, multiple cavities in the lung, and soft tissue lesions. He had a fever. Hb value was 9.1 g/dl, CRP 160 mg/L, Procalcitonin 0.7 ng/mL. ANCA was studied from the patient and the result was positive (pr3 positive).In the follow-up, the patient developed episcleritis in the eye. The patient was diagnoised with GPA accepted. Plasmapheresis and pulse steroid were administered every other day, followed by intravenous cyclophosphamide. After the treatment, a significant improvement was observed in the lesions in the lung and prostate and in the perforated lesion of the palate in the episcleritis clinic.

DISCUSSION

Granulomatosis with Poliangiitis (GPA) is an associated systemic vasculitis, but it is characterized by mainly respiratory tract involvement. Urogenital system involvement is rarely observed in the literature (2.3-7.4%). In the presence of urogenital system involvement, the most frequently affected area is the prostate, but also epididymis, bladder, seminal vesicles, testicles, ureters, urethra, cervix, vagina, perineum and penile involvement has been reported [1]. In prostate involvement, patients may present with prostate abscess or prostatitis. The initial symptom may only be dysuria, as in our case. Infections, simple granulomatous prostatitis, sarcoidosis should be kept in mind in the differential diagnosis [2]. As in other involvement of Granulomatosis with Poliangiitis (GPA), patients benefit from cyclophosphamide treatment [3]. Urogenital system involvement and especially prosthesis involvement should be kept in mind in patients with a diagnosis of GPA, and these symptoms should not be overlooked while managing patients.

KEY MESSAGE

- *Urogenital system involvement and especially prostate involvement should be kept in mind in patients with a diagnosis of GPA, and these symptoms should not be overlooked while managing patients.*

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PP-7: Presenting with Episcleritis in ANCA Associated Vasculitis: A Case Report

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ANCA associated vasculitis (AAV), is a group of diseases that present different clinical signs of autoımmune character that concern many systems. It is heterogeneous group of diseases that presents many differrent clinical findings. Upper airway tract lesions and pulmoner symptoms are often found. Pulmoner infiltrations in imaging and kidney abnormalities in laboratory examinations are the first findings that bring to mind te possibility of AAV. AAV affects classically pulmonary-renal systems but these types of vasculitis can present with unusual symptoms. The eye is important target in AAV and various eye lesions can develop. In this case report, an AAV case with episcleritis as the first finding is presented.

CASE REPORT

A 45 year old male patient had a rash in the right eye three months ago. Local treament recommended by the ophtalmalogist. Later, similar redness in the same eye repeated four times. For the last month, there was pain in the left knee with red eye. Fever and cough have been added for a week. He was hospitalized with pnemonia. Patient's symptoms did not improve despite antibiotic treatment. It was observed "Cavitary lesions containing calcification in the upper lobe apical of right lung, cavitary lesions of about 1,5x1,5 in the lower lobe posterior – noduler density of about 1,5 cm in yhw lower lobe, two fissure- based noduler lesions 4 mm diameter in the left lung lower lob" in high resolution computer tomography (HRCT). Neutrophilia (7.7x103 /µL) and thrombocytosis (391x103 / µL), increase in ESR (63 mm/h) and CRP (9.5 mg/dL) and p-ANCA positivity (IFA 1/10) were present in the laboratory examination. Liver function tests, creatinine and glomerular filtration values were in the normal range. He had no abnormality in complete urine test. Episcleritis was diagnosed in eye examination. The patient was evaluated as AAV particularly granulomatosis poliangiitis with clinical and laboratory findings. It was decided to biopsy from lung lesions for different diagnose. It was started metil prednisolone for induction therapy. Necrotizing granulamotosis inflamation was observed in pathology specimen. Tuberculosis examination was negative.

The patient was diagnosed granulomatosis poliangitis with clinical and histopathological findings and ıt was started 500-700 mg/m^2 pulse cyclophospomide with high metil prednisolone. Metil prednisolone was gradually reduced and maintenance azathioprine 2.5 mg/kg was started after cyclophospomide cycles. The reason for respiratory complains in the tenth month of treatment was re-evaluated. Cavitary lesions were seen in HRCT (**Figure 1**). It was accepted as a relapse disease and rituximab therapy was started. Low dose metil prednizolone and azathioprine were continued, a second rituximab infusion was administerd in the sixth month. He has been followed up as AAV in remission for five years.

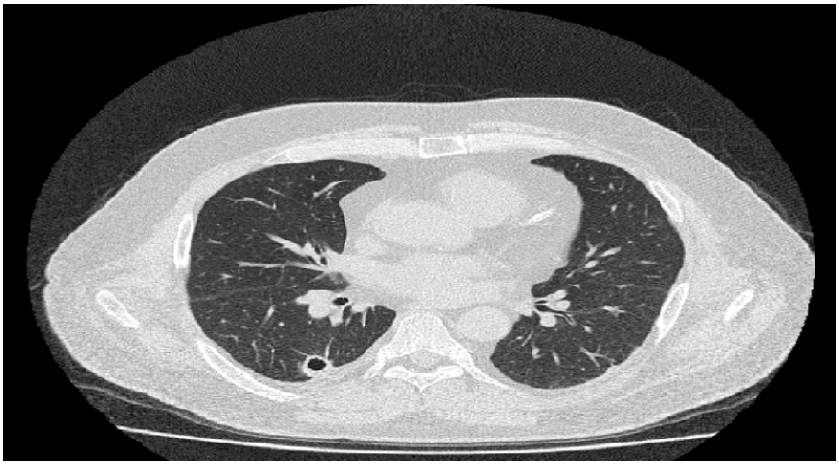

Figure 1: Caviter lesion in lung with granulomatosis poliangitis

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DISCUSSION

The eye is an organ frequently affected by AAVs. Episcleritis, scleritis, corneal melting, uveitis, orbital inflamation or retroorbital masses are seen in eye involvement. In a Patompong's study, they examined 183 patient with eye involvement retrospectively, ıt was found that approximately half of the patients had ocular involvement at the time of the diagnosis. Eye lesions that started an average of one year before AAV diagnosis have been described [1].

Granulomatosis poliangitis; it affects small-medium size vessel; ıt has many different clinical findings. It causes damage most often lung, kidney, upper airway tract. Pulmoner and renal involvement have worse prognosis and increased mortality and morbidity [2]. Eye lesions can develop any period of disease, and they respond to high dose corticosteroid and cyclosphospomide remission of the disease. Eye involvement that is resistant to conventional treatments and with relapses has also been reported [3].

The case presented here is a case of granulomatosis poliangitis that starts with recurrent episcleritis attacks, musculoskeletal symptoms are added eventually pulmoner lesions develop. It shows AAV can present different clinical symptoms. It reveals that serious inflammatory diseases may be the basis of recurrent episcleritis attacks and systemic evaluation and clinical follow up are important.

KEY MESSAGE

- *This case is good example for showing that AAVs may present with symptoms other than classical pulmonary and renal syndrome clinic and that AAVs may be the cause of persistent inflammatory eye lesions.*

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PP-8: A Granulomatosis Polyangiitis Patient Presenting with Recurrent Upper Airway Infection

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Granulomatosis poliangiitis is a disease that develops due to inflammation of small, middle-sized vessels of unknown etiology, which can be seen all ages especially in the middle ages. It may progress with signs of inflammation in the upper respiratory tract unresponsive to antibiotics, as well as vital organs such as lungs and kidneys.

Case Report

28 years-old male patient. On his medical history it was learned that he did not have any illness. He admitted to otorhinolaryngology department of hospital with ear pain. Otitis was diagnosed and antibiotic treatment was started. After a month, the patient had complaints of ear pain again and cough with mucus was also added. Sinus CT was taken in the hospital which he admitted and reported as: septum minimally deviated, middle ear vertical areas were bilaterally pneumatized. Lung CT: It has been reported as a subpleural approximately 2.5 cm central cavitated, slightly irregularly demarcated, nodular lesion in the upper lobe of the left lung, and several thick-walled cavities of which the largest was 44x29 mm in the lower lobe of both lungs. The patient was referred to our hospital for advanced examination and treatment. The patient's laboratory results were Hb:9.7g/dL, wbc:10.6x103/µL, plt:331x103/µL, crp:155 mg/dL, ESR 51/sa ,procalcitonin 0.08 ng/l, ALT:19 U/L,AST:30 U/L, ALP:134 U/L, GGT:159 U/L, kr:0.6 mg/dL, BUN:23 mg/dL and viral hepatitis were negative. Spot urine protein/creatinine ratio: resulted as 138. Urine sediment was evaluated as inactive. The patient was hospitalized with a pre-diagnosis of vasculitis and infection. Blood and urine cultures were taken because the fever of patient was 38 C and above. Direct ARB test and culture were sent for tuberculosis. Sampling was performed for galactomannan with suspected opportunistic infection. ANA and dsDNA were sent and the results were both negative. ANCA was sent in terms of vasculitis. Abdominal USG was used to illuminate the increase in Liver enzymes; minimal dilatation in intrahepatic bile ducts was detected. MRCP was applied for dilatation in intrahepatic bile ducts and evaluated as normal. AMA was sent; the result was negative. c-ANCA result was positive. The patient's diagnosis was considered to be Granulomatosis with Poliangiitis (GPA). The increase in liver functonal tests was attributed to disease involvement. Anemia was evaluated as chronic disease anemia. Since secondary bacterial infection could not be ruled out, empirical antibiotherapy and immunosuppressive treatment with 100 mg methylprednisolone (iv 5 days) were started simultaneously. Clinical response was obtained on the third day of treatment. The CRP level was decreased to 26 mg/dL. The patient whose general condition improved during the follow-up was discharged from the service and followed up in the outpatient clinic. No significant reproduction was detected in his blood,urine and mucus cultures. Rituximab treatment was planned for the patient. Trimethoprim-sulfomethaxazole prophylaxis was initiated due to upper respiratory tract involvement.

DISCUSSION

Granulomatosis polyangiitis is a systemic vasculitis of unknown etiology, mostly affecting the upper and lower airways and kidney. The onset of the disease can be with symptoms of upper respiratory tract involvement (mostly in the nasal cavity and paranasal sinuses) and can be seen in 70–100% of cases [1]. There may be multiple antibiotic use and persistent sinusitis and rhinitis that do not respond to these treatments [2]. As it is not included in differential diagnoses, as in our case, patients consult a doctor with similar complaints multiple times, and other organ involvement may occur until the disease is diagnosed. The purpose of the presentation of this case is to draw attention to the necessity of further examination in terms of Granulomatosis with Poliangiitis (GPA) in case of recurrent persistent head and neck inflammation.

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KEY MESSAGE

- *Inflammation is a common symptom of infections and autoimmune diseases, and it should be considered especially in the case of antibiotic unresponsiveness; In cases of inflammation involving*

the head and neck region such as recurrent otitis and sinusitis, granulomatosis polyangiitis should be considered in differential diagnosis.

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PP-9: Coexistence of Necrotizing Episcleritis, Sacroileitis and Familial Mediterranean Fever due to Granulomatosis Polyangiitis

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Granulomatosis polyangiitis (GPA), previously known as Wegener granulomatosis, is a rare multisystem autoimmune disorder characterized by necrotizing granulomatous inflammation and pauci-immune vasculitis. Respiratory symptoms such as recurrent bloody rhinorrhea, rhinosinusitis and nodular lesions in the lungs are seen in 45% of cases and in 87% during the course of the disease [1,2]. Ocular involvement is common and can range from mild conjunctivitis to scleritis, episcleritis, uveitis, ciliary vasculitis and retro-orbital mass lesion [3]. In this case, we wanted to present a GPA case with lung, kidney and eye involvement.

CASE REPORT

A 64-year-old male patient was admitted to the emergency department in 2010, after complaints of fatigue, nausea-vomiting, shortness of breath and weight loss for the last 2 months. WBC: 13000 /µL, Hb: 7.7 g/dL, Htc: 25.5%, urea: 141.6 mg/dl, creatinine: 8.2 mg/dl, albumin: 2.1 g/dl, CRP: 118 mg/L, ESR was> 140 mm/hour. There were protein 2+ and 5-6 leukocytes in each field in urine analysis. The patient, whose parenchyma echo patterns of bilateral kidneys were evaluated as grade 2 on renal USG, is admitted to the nephrology service for examination and treatment. Micro total protein (MTP) in 24-hour urine was 2.7 g/day. Hemodialysis is applied intermittently to the patient because of oliguric urine output, dyspnea and metabolic acidosis in arterial blood gas.

Minimal mucosal thickening is detected in the right sphenoid sinus on CT of the patient who has frequent sinusitis history. In the thoracic CT taken upon the presence of dyspnea, fibrotic changes in the apex of both lungs and the infiltration area leading to consolidation in the right lower lobe posterobasal and infiltration areas in both lungs are observed. No pathology was found in abdominal CT. When the C-ANCA was> 100 in the etiology-based examinations of the patient, whose infection was excluded, renal biopsy was performed on the patient. The pathology report resulted as "kidney tissue characterized by crescent development in 1/3 of glomeruli and minimal mesangial matrix increase and cell proliferation in other glomeruli". The patient was diagnosed with Granulomatosis with Poliangiitis (GPA) because of kidney and lung involvement. The patient's BVAS-WG score was calculated as 7.

The patient was started on cyclophosphamide with pulse steroid. Azathioprine 100 mg / day was started as maintenance therapy for the patient, who received 6 cycles of cyclophosphamide treatment. The patient applied to us again after 4 years with complaints of inflammatory hip pain, morning stiffness lasting half an hour, intermittent abdominal pain attacks, redness in the right eye, headache and nosebleeds. MEFV gene analysis M694V, which was studied due to proteinuria, was found to be homozygous in the patient with abdominal pain attacks and family history of FMF in the anamnesis. CRP: 98 mg/L, ESR: 51 mm / hour, creatinine: 1.2 mg/dl and bilateral sacroielitis was detected on sacroiliac graphy. Due to pain and loss of vision in the right eye, a diagnosis of necrotizing episcleritis and corneal melting was made on eye examination. 1 gram of pulse methylprednisolone for 3 days, followed by 1 mg/kg/day methylprednisolone, rituximab 1000 mg 0-15. days / 6 months given. In addition, prophylactic trimethoprim-sulfamethoxazole was started. In the maintenance treatment, he was discharged by starting methotrexate 15 mg/week, folbiol and colchicine treatment and reducing the methylprednisolone treatment dose. In the follow-up of the patient, BVAS-WG score decreased. The patient is in remission at outpatient clinic controls.

DISCUSSION

GPA is necrotizing vasculitis of small to medium vessels, which is a component of a wide range of diseases called anti neutrophil-cytoplasmic-antibody (ANCA) -related vasculitis. Its diagnosis is made clinically and histologically. The clinic can range from mild organ involvement to severe multisystem organ involvement [4]. In our case, upper respiratory tract, lung, kidney and eye involvement was observed.

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It has been reported that c-ANCA (cytoplasmic-ANCA) formed against proteinase 3 target antigen in GPA is highly specific for active GPA and c-ANCA titers are directly related to GPA disease activity. In patients with GPA with c-ANCA positivity, the possibility of kidney and respiratory tract involvement is high and the tendency to relapse has increased. It has been reported that there is a correlation between the c-ANCA level and the risk of exacerbation in patients in remission [5]. Treatment is individually tailored to the severity of the clinic. RAVE and EUVAS studies have shown that rituximab is equally effective as cyclophosphamide in induction of remission. In addition, Rituximab has demonstrated superiority in the induction treatment of relapsed cases [6]. When remission occurs, it is recommended to reduce the corticosteroid dose gradually, discontinue cyclophosphamide, and maintain remission with methotrexate or azathioprine [7].

KEY MESSAGE

- *GPA is a rare, difficult to diagnose disease that can involve many organs and has high mortality. Early diagnosis and treatment are of great importance in terms of prognosis.*

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PP-10: Granulomatosis with Poliangiitis (GPA); Systemic Vasculitis of Small Vessels Associated with the Presence of ANCA

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In 2015, high sedimentation (ESR) and low hemoglobin (Hb) were observed in a 52-year-old male patient who first applied to chest diseases with the complaint of dyspnea. Pulmonary malignancy was considered as a pre-diagnosis. A mass consistent with malignancy and accompanying lymph nodes and pleural effusion were detected in the thorax computed tomography (CT). Malignancy was ruled out as a result of the bronchoscopic biopsy. The patient was referred to our outpatient clinic in terms of arthritis and high ESR etiology. In physical examination; Bilateral PIP (proximal interphalangial palanx) and MCF (metacarpophalangial) joints and wrists were present in the hands. Apart from this, no pathological finding for the upper respiratory tract was found. Considering rheumatoid arthritis (RA) in the foreground, examinations were made. The patient who had high ESR and CRP (C reactive protein) accompanying anemia had RF: 198 IU/L too. In advanced examinations; C-ANCA (cytoplasmic ANCA) was significantly positive in ELISA/IFA. Anti-CCP was negative. Otorhinolaryngology and eye department was consulted. Echocardiogram was done. In addition, protein was measured in 24-hour urine. The patient was diagnosed with GPA with all these results. Pulmonary hemorrhage was detected in the imaging performed on the patient whose shortness of breath and hemoptysis recurred. Pulse steroid therapy was given as the monitored creatinine value (6.5 g / dl) increased. In addition, plasmapheresis was performed. The patient's clinic was stabilized. The BVAS-WG score of the patient who was diagnosed with Wegener was calculated as 13. Looking at the total number of components; While arthritis, pleurisy, nodule / cavity and secondary infiltration to Wegener met 4 minor / new worsening criteria, alveolar hemorrhage, respiratory failure and creatinine increase by more than 30% met 3 major / new worsening criteria. Five factor score; It was calculated as 2 due to the development of kidney failure and the absence of upper respiratory tract symptoms. Vasculitis damage index was calculated as 1 due to fibrosis developing in the lung parenchyma. Remission was achieved with rituximab. In the imaging performed during the outpatient clinic controls, it was observed that the lesions in the lungs were completely resolved **(Figure 1)**. After treatment, BVAS-WG score decreased to 1. Maintenance treatment was given with weekly treatments such as methotrexate, methylprednisolone, trimethoprim / sulfomethaxazole. The patient, whose steroid treatment was discontinued, has been followed for 5 years with rituximab (every 6 months) and methotrexate.

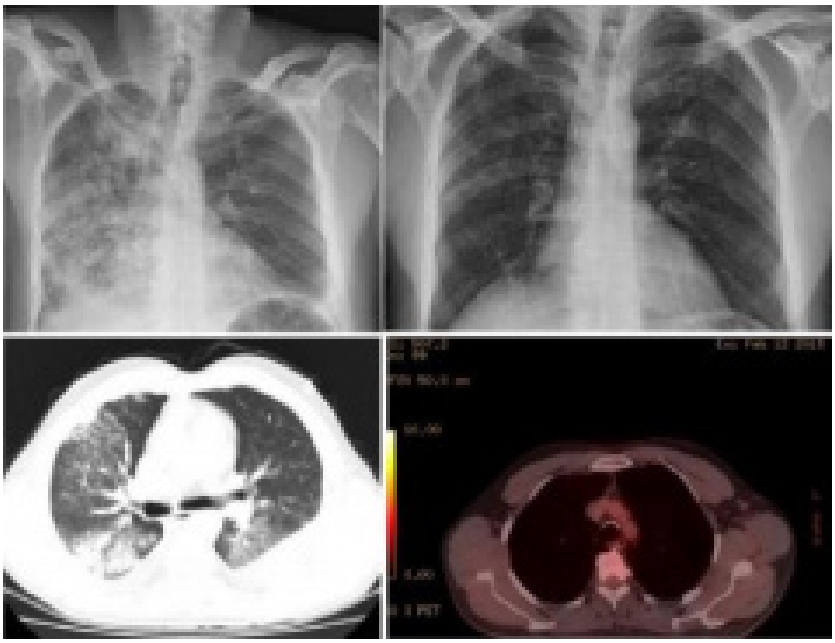

Figure 1: Comparative views of regressing lesions taken before and after treatment.

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DISCUSSION

GPA is a type of autoimmune vasculitis involving small vessels, with necrotizing glomerulonephritis. The diagnosis of GPA is made clinically and histologically. The disease may progress with mild involvement in the upper respiratory tract such as the ear and nose during the active period, as well as severe multi-organ failure [2]. In our case, the main involvement was predominantly pulmonary and renal involvement. The frequency of renal involvement in GPA is over 70% [3]. It must meet international criteria for diagnosis. CT and biopsy are used for these criteria. In 2011, rituximab, the B cell inhibitor anti CD-20, was among the treatment options for remission in active patients [4]. Steroid therapy should be discontinued in the patient in remission, as in our case [5].

KEY MESSAGE

- *GPA may present with arthralgia/arthritis. Rituximab is an effective option. Steroid should be tapered slowly in patient during remission.*

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PP-11: Granulomatosis with Polyangiitis: Case Report

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Granulomatous with polyangiitis (GPA) is an autoimmune small vessel vasculitis with frequent antineutrophil cytoplasmic antibody (ANCA) positivity and an inflammatory reaction pattern such as necrosis, granulomatous inflammation, and vasculitis. GPA may show either classic or limited involvement. In classic involvement, GPA may involve the upper respiratory tract, lungs, and kidneys. In limited involvement, however, GPA does not show renal involvement and is often seen in women.

CASE REPORT

A 61-year-old male patient presented with a history of weakness, weight loss, fever, burning with urination, red eyes, and nasal obstruction. In March 2019, the patient presented to another healthcare center with the complaints of weakness and burning with urination and was hospitalized and then initiated on an ertapenem therapy, and then was referred to our Infectious Diseases department. The patient was also examined by an ophthalmologist for the redness in the right eye and then was diagnosed with scleritis. Paranasal computed tomography (CT) that was performed due to nasal obstruction persisting for one month showed an appearance of high-density soft tissue with hyperdense components in the right maxillary sinus causing aeration loss in the right maxillary sinus and also showed obliteration of the right ostiomeatal complex and a lesion in the right maxillary sinus extending to the right ethmoid sinuses and causing bone erosion in the lateral wall of the ethmoid sinus. Additionally, CT also revealed mild mucosal thickening in the left maxillary sinus. Although chest X-ray was normal, CT revealed an appearance of mild paraseptal emphysema in the right upper lobe apicoposterior segment of the right lung. Purpuric rash was present in the medial aspect of both legs.

Laboratory parameters were as follows: hemoglobin (Hg) 11.8 g/dl, white blood cell count (WBC) 18.5 K/Ul, neutrophil (Neu) 16.1 K/Ul, platelet (Plt) 507 K/Ul, alanine transaminase (ALT) 80 U/L, C-reactive protein (CRP) 228, procalcitonin (PCT) 0.05 ng/Ml, erythrocyte sedimentation rate (ESR) 135 mm/h, blood culture: no growth, creatinine 0.56 mg/dl, complete urinalysis: 9 leukocyte, 76 erythrocyte, protein (+), ANA (-), Anti ds DNA (-), CCP (-), RF (-), ANCA 1/32 (+), MPO ANCA (-), and PR3 ANCA (+++).

Throughout the follow-up period, the patient was evaluated by our clinic and had no fever, no growth in blood and urine cultures, was negative for PCT and positive for PR3 ANCA, and had no decrease in CRP level. The patient was initiated on methylprednisolone 1 mg/kg/day. On day 15 of the treatment, creatinine level was 1.69 mg/dl and complete urinalysis indicated +2 protein. Subsequently, renal biopsy that was performed by the Nephrology department indicated focal glomerular crescent formation (8/33 glomeruli) and signs of vasculitis, and thus cyclophosphamide 50 mg 2x1 was added to the treatment. The Birmingham Vasculitis Activity Score (BVAS) of the patient was 19 and the BVAS for Wegener's Granulomatosis (BVAS-WG) score was 21. Remission was achieved with steroids and cyclophosphamide. The maintenance therapy was continued with the addition of azathioprine 2 mg/kg/day.

The patient is currently being followed up in remission and receiving azathioprine 50 mg alone. His ESR is 8 mm/h, creatinine level is 1 mg/dl, he has no protein in urine, and his chest X-ray is normal.

DISCUSSION

Granulomatous with polyangiitis (GPA) is an important clinical picture that needs to be recognized early and treated appropriately. Throughout the course of GPA, vasculitis accompanied by necrotizing granulomas can be seen in different organs and organ-specific symptoms may occur. Both morbidity and mortality have been significantly reduced with corticosteroids and novel immunosuppressive treatments.

KEY MESSAGES

- *GPA can manifest with a wide variety of symptoms and can be included in the differential diagnosis of numerous diseases. Of particular importance, its differential diagnosis with infection should be evaluated in detail.*
- *GPA has a high mortality unless treated. With treatment, one-year survival is 90%, two-year survival is 87.5%, and five-year survival is 76%.*

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PP-12: Are ANCA Associated Vasculitides Really PAUCI-IMMUN?: Vasculitis in Kidney Biopsy

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Kidney involvement in ANCA-associated vasculitis is a significant cause of morbidity and mortality. Kidney biopsy plays a pivotal role for diagnosis and differential diagnosis. Even though they are named as pauci-immune glomerulonephritis, vasculitis can also sometimes be found. In this case report, we aimed to draw attention to the findings of fibrinoid necrosis and vasculitis in the kidney biopsy of a newly diagnosed MPO - ANCA vasculitis patient.

CASE REPORT

A 46-year-old male patient applied to Chest diseases department due to cough and shortness of breath lasting for 5 months. . It was found out that the patient had lost 7 kilograms involuntarily during a period of 3 months and he had developed a reddish skin rash around his chest and neck before his complaints started. The patient did not have hemoptysis Mild sensory axonal polyneuropathy was detected in the lower extremities in the electromyography (EMG), which was taken when he had presented with the complaints of pain in the legs, loss of strength and fatigue after standing for a while that was lasting for 5 months.

Patient was directed to Rheumatology Department. Physical examination showed a respiratory rate of 20 / min , heart rate of 90 / min , blood pressure of 115 /80 mm/Hg. Velcro rales were heard during the auscultation of the lungs. Extremity strength examination was 5/5 in all extremities. In the laboratory analysis of the patient, first stage of proteinuria (758 mg/day) was found. His kidney functions were found to be within normal range (creatinine 0.91 mg/dL , urea nitrogen (BUN) - 16.8 mg/dl, uric acid - 4.6 mg/dL) and his acute phase reactants were found to be elevated (sedimentation 119 mm/hour c-reactive protein - 14, 0 mg/dL). Rheumatological marker evaluation of the patient was as follows: ANA (+) (titer 1/100) , RF (+), antidsDNA (-), CCP (-) ENA (-), p-ANCA (+) (MPO, IF 1 /320). In thorax basal and peripheral irregular reticular densities were observed in both lungs and traction bronchiectasis and honeycomb appearances, which were more prominent at the posterior costophrenic sinus level, were found to be consistent with usual interstitial pneumonia **(Figure 1)**.

Before renal biopsy, renal USG of the patient was evaluated as within normal limits. Renal biopsy result was: Focal necrotizing extracapillary proliferative glomerulonephritis, pauci-immune , ANCA-related. Cellular/ fibrocellular crescent ratio of the was 7/15. Vasculitis that contains fibrinois necrosis. Interstitial inflammation predominantly around the glomeruli, patchy tubular atrophy and interstitial fibrosis. In our case, a diagnosis of MPO-ANCA-associated vasculitis was made with the presence of proteinuria in urine, increased acute phase reactants, p-ANCA positivity and kidney biopsy findings. The treatment was started with pulse steroids + cyclophosphamide.

DISCUSSION

In the kidneys, the characteristic lesion in AAV is segmental necrosis of glomerular capillary loops, with little or no deposition of immunoglobulin or complement, termed 'pauci-immune' focal necrotizing (and crescentic) glomerulonephritis. Different lesions in different glomeruli within the same biopsy specimen reveal the asynchronous nature of the vasculitic injury. Acute glomerular injury is characterized by segmental necrosis with extravasation of fibrin and erythrocytes into the urinary space, followed by proliferation of parietal glomerular epithelial cells forming a cellular crescent.

Kidney biopsy is important in the diagnosis of these patients. Glomerular lesions are used for staging the renal disease. In histopathological classification, the dominant lesion is linked to the prognosis. There are four patterns of injury, namely sclerotic (≥50% globally sclerosed glomeruli, worst prognosis), focal (≥50% normal glomeruli, best prognosis), crescentic (≥50% cellular crescents, intermediate prognosis) and mixed (no single dominant type of lesion, prognosis is better than the sclerotic pattern but worse than the crescentic pattern) [1].

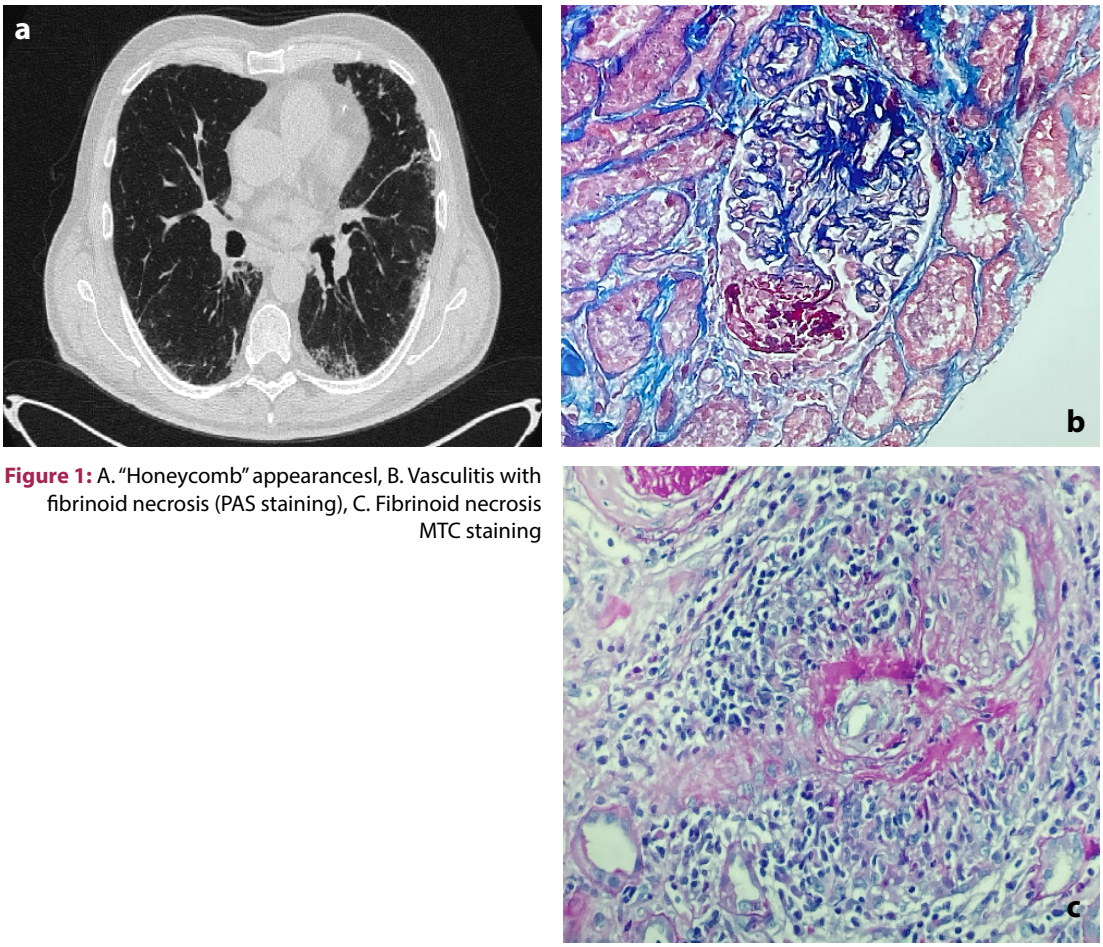

Figure 1: A. "Honeycomb" appearancesl, B. Vasculitis with fibrinoid necrosis (PAS staining), C. Fibrinoid necrosis MTC staining

The combination of glucocorticoids with either cyclophosphamide or rituximab is the current standart of care for induction of remission in severe disease. Cylophosphamide treatment is given by intermittent intravenous pulse or by daily oral dosage. Doses are reduced for increased age and renal impairment. Close monitoring is essential to minimize the risk of myelotoxicity [2,3].

KEY MESSAGE

- *Though ANCA associated vasculitides are called as pauci immune, there can be signs of vasculitis in the kidney biopsy.*

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PP-13: Limited GPA or Localised GPA: How to Classify?: Case Report

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Granulomatous with Polyangiitis (GPA) is a Anca Associated Vasculitis (AAV) that can show multisystemic involvement. In the development process of the disease, it is one of the processes that are claimed to start from the upper respiratory tract and transition to a systemic state. EUVAS (European Vasculitis Study Group) defined GPA patients into subtypes as localized / early systemic / generalized / severe disease and VCRC (Vasculitis Clinical Research Consortium) as limited / severe disease. EUVAS has determined as criteria for localized disease that it does not involve other systems other than upper respiratory tract and lung involvement, does not develop life-threatening organ dysfunction, may have ANCA negativity, and creatinine <1.35 mg/dl. VCRC, on the other hand, determined the criteria for GPA in the distinction of limited / severe disease as the absence of life-threatening organ dysfunction for the limited type, creatinine <1.40 mg/dl, absence of erythrocyte casts in the presence of hematuria, and systemic involvement if not required. In this case report, it was aimed to emphasize localized / limited disease by presenting a patient with early stage disease who was referred to rheumatology with severe inflammation findings + septum perforation by an ENT physician. In our case, a 39-year-old female patient had upper respiratory tract necrotizing inflammation, acute phase reactant elevation, PR3-ANCA positivity; Localized type GPA was considered due to the absence of involvement in the lung, renal, mucocutaneous, eye and other systems. Although the disease was of a localized / limited type, the patient was observed to be resistant to steroid and Azathioprine medical treatments in the follow-up, and Rituximab treatment was started. As a result, although it is diagnosed as limited / localized GPA, it can be resistant to conventional treatment and can be switched to Rituximab treatment as in our patient.

INTRODUCTION

Granulomatous with polyangiitis (GPA) is an Anca-associated vasculitis (AAV) that can show multisystemic involvement. In the development process of the disease, it is one of the processes that are claimed to start from the upper respiratory tract and transition to a systemic state. The assessment of disease severity and prevalence may differ even by international organizations. EUVAS (European Vasculitis Study Group) defined GPA patients into subtypes as localized / early systemic/generalized/ severe disease and VCRC (Vasculitis Clinical Research Consortium) as limited / severe disease [1]. In this case report, it was aimed to emphasize localized/limited disease by presenting a patient with early-stage disease who was referred to rheumatology with severe inflammation findings + septum perforation by an ear-nose-throat (ENT) physician.

CASE REPORT

A 39-year-old female patient was referred to the rheumatology outpatient clinic with signs of sneezing, nasal discharge, flu symptoms that started 7 months ago, findings consistent with severe inflammation in the nasal region, and perforation in the anterior nasal septum. Therefore, the patient did not benefit from the antibiotherapy and nasal spray treatments given. The patient had no known internal disease in his history. Physical examination revealed body temperature 36.5 ˚C, blood pressure 120/80 mmHg, no pathological findings, no skin rash, no active arthritis findings on system examination. Laboratory findings showed anemia 11.2 g/dl, leukocyte 6000 / mm^3, eosinophil 100 / mm^3, increased CRP 2.38 mg / dl (0-0.8), sedimentation 67 mm / hour, creatinine 0.53 mg / dl, other biochemical parameters were normal. ANA (Anti-nuclear antibody) 1/100, PR3-ANCA (Proteinase3-ANCA) 1/320 were positive. Trace protein was seen in urine analysis, no erythrocyte or leukocyte was detected. Spot urine protein was seen as 109 mg / g creatinine. Paranasal computed tomography revealed mucosal thickening in the sphenoid sinus, maxillary, frontal, and ethmoid sinuses on the left, and nasal septum deviation to the left, and no pathological finding was detected in thorax computed tomography. An excisional biopsy was taken from the 1 cm perforated area in the anterior of the nasal septum. As a result of the pathology, necrotic tissues containing intense mixed type inflammation were detected. The patient had signs of necrotized inflammation in the nasal region, increased acute phase reactants, PR3-ANCA positivity; Because of the absence of kidney, lung, and other system findings, the patient was diagnosed with

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localized type Granulomatosis with Poliangiitis (GPA). 40 mg/day prednisolone treatment was started as the initial treatment.

Azathioprine was added at a dose of 150 mg/day in addition to the existing steroid treatment, due to the high level of acute-phase reactants under steroid treatment and no decrease in the titer of PR3-ANCA positivity. After 6 months, there was a further increase in acute phase reactants and PR3-ANCA titer. It was decided to give Rituximab treatment because of the granulomatous with polyangiitis clinic's resistance to azathioprine treatment. In viral hepatitis markers sent before rituximab, Entecavir was started for occult hepatitis b reactivation prophylaxis due to HBsAg negative, anti-Hbs positive, anti-Hbc Ig M negative, anti-Hbc Total positivity, and HBV virus load negativity, the quantiferon test was found negative. Rituximab treatment with a dose of 1000 mg was started during the follow-up. In the follow-up of the patient, no spread to other systems was observed except upper respiratory tract involvement.

DISCUSSION

EUVAS classified GPA patients as localized / early systemic/generalized/severe disease according to the severity of disease progression. The criteria for the localized disease are that it does not involve other systems other than upper respiratory tract and lung involvement, does not develop life-threatening organ dysfunction, may have ANCA negativity, and creatinine is <1.35 mg/dl. VCRC, on the other hand, determined the criteria for GPA in the distinction of limited/severe disease as not having life-threatening organ dysfunction for the limited type, creatinine <1.40 mg/dl, absence of erythrocyte casts in the presence of hematuria, and systemic involvement if not required [1]. When we evaluate these criteria in our case, the presence of upper respiratory tract necrotizing inflammation, acute phase reactant elevation, PR3-ANCA positivity; We think that localized type GPA may be present when no involvement in the lung, renal, mucocutaneous, eye, and other systems are detected. Although the disease was of a localized/limited type, the patient was observed resistant to steroid and Azathioprine medical treatments in the follow-up, and Rituximab treatment was started. Supportive studies have been observed in the literature regarding the possibility of relapse in patients with localized / limited GPA, as in our case [2].

KEY MESSAGES

- *Although it is diagnosed as a limited/localized GPA, it can be resistant to conventional treatment and Rituximab treatment can be started as in our patient.*

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PP-14: New Presentation(s) of GPA During Disease Course

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Granulomatosis with polyangiitis (GPA) is a multiorgan/system disease. Given the different involvement patterns, it is important to understand whether there is a difference in disease onset findings and presentations during disease course. Herein a case with initial presentation of pulmonary involvement is shown with episcleritis as a cause of flare during the course.

CASE REPORT

A 42-year-old male with fever, arthritis, cavitary lesions on thorax computed tomography and antineutrophil cytoplasmic antibody (ANCA) positivity was diagnosed with GPA in 2011. Maintenance treatment with azathioprine (AZA) and low-dose corticosteroid (LD-CS) was started after induction with 18-cycles of cyclophosphamide. In 2012, he was diagnosed with mesenchymal tumor on the left leg and cured with surgery and radiotherapy. In 2014, he was presented to the clinic with red eye on both eyes. He had c-reactive protein (CRP) level of 1.51 mg/dl and ANCA was positive (1/320, PR3 positive on ELISA). Ophthalmologic examination revealed episcleritis and no other activation signs of GPA was found. He was given methotrexate (MTX) 10 mg/week and CS dose was increased to 20 mg/day of prednisolone. Because of the persistent eye symptoms, patient was switched to Rituximab (RTX). With RTX (1000 mg D1-D15, 5-course) and LD-CS therapy patient has been in remission between 2015-2018 and the treatment was stopped in 2018. He had been followed up in 3 month-intervals even in the in COVID-19 era. In October 2020, he had a flare with red eyes along with bilateral knee arthritis.

DISCUSSION

In patients with ANCA-associated vasculitis disease flare can only be mentioned after achieving remission. However, it is quite difficult to define remission strictly with the ongoing signs and symptoms that can be linked to damage. Varied studies have provided important clues to define patients with high risk of relapses such as being cytoplasmic-ANCA or proteinase-3–ANCA positivity [1,2]. Besides the immunological phenotype it has been shown that patients with involvement of the lungs, upper airways, or cardiovascular system seem to have higher relapse risk [1-3]. However, the literature on whether there is any pattern of organ/ system involvement in relapsing patients is scarce.

It is known that patients could only have subclinical inflammation defined by various biomarkers (eg. acute-phase reactants, ANCA levels) or may present with symptoms that could be attributed to either disease or damage. But our case also showed us involved organs/ systems can change over time and a relapse can be seen in an organ that has never involved. In this case, eyes were involved for the first time when he had a flare with the episcleritis.

Clinicians should be aware of every single symptom that can be attributed to ANCA-associated vasculitis with the knowledge of different organs/ systems can be involved many years later.

KEY MESSAGES

- *Different organs/systems can be involved for the first time during the disease course of GPA.*
- *The literature on whether there is any individual characteristics predicting the pattern of organ involvement in relapsing patients is needed.*

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PP-15: Granulomatosis with Polyangiitis in A Child: Case Report

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Granulomatosis with Poliangiitis (GPA) (Wegener's granulomatosis) is a rare disease characterized by necrotizing granulomatous vasculitis that may involve the upper respiratory tract, lungs and kidneys. Among pediatric vasculitic diseases, it is the pediatric vasculitis that laboratory and imaging methods help the diagnosis the most. We present a 13-year-old female patient who was diagnosed with granulomatous with polyangiitis who applied to our outpatient clinic.

CASE REPORT

A thirteen-year-old girl was diagnosed with bilateral episcleritis in September 2018 after applying to an ophthalmologist with a complaint of rash in both eyes. The patient, who was followed up with steroid drop treatment, was followed up in November 2018 due to joint swelling in the 1st fingers of the right hand and right shoulder pain after 10 days of upper respiratory tract infection. Right hand MRI showed an appearance compatible with 1st finger metacarpofelengeal joint arthritis and synovitis in the other joints of the right hand. The amount of glenohumeral intra-articular fluid was minimally increased in shoulder MRI. In the patient with high acute phase reactants, juvenile idiopathic arthritis of the polyarticular type was primarily considered, and ibuprofen 30 mg / kg / day was started as a nonsteroidal anti-inflammatory drug. Accompanying abdominal pain, blood in urine that becomes evident upon standing up. There is no rash on the body, no diarrhea, no chronic sinusitis, no otitis history, no continuous nasal discharge is described. With these findings, granulomatosis polyangiitis was considered in the patient who applied to the HÜTF Pediatric Rheumatology outpatient clinic due to the history of episcleritis, microscopic heamturia, and intermittent arthritis, and an ANCA profile was requested.

In his history, his vaccinations are appropriate for his age, complete, and normal developmental stages. There was a history of atypical pneumonia once. There was no history of consanguinity between the parents. General condition is good, cooperative, blood pressure (BP): 110/70 mmHg, pulse (NA): 96 / min, skin pigmentation anomaly, no hepatosplenomegaly, no lymphadenopathy. In routine laboratory examinations, leukocyte: 6800 / mm3, hemoglobin: 12.9 mg/dl, hematocrit: 37% platelets: 289,000 / mm3, high erythrocyte sedimentation rate: 50 mm/hour, C-reactive protein: 3 mg / dl, urea: 26 mg/dl, creatinine: 0.58 mg / dl, rheumatoid factor (RF): 127 (0-14) C3: 110 mg / 100ml, C4: Normal. Antinuclear antibody (ANA): 1/100, anti-dsDNA (-), granular pattern, 36 erythrocytes were detected in complete urine analysis. PA chest radiography; previous infection in the right lung, suspicious nodular appearance **(Figure 1)** and in ENT examination; there is no finding in favor of granulomatous polyangiitis, but there is sinusitis, antibiotherapy was given. It was thought that the patient, who had nasal discharge, cough increasing at night, sputum production and hemoptysis in the form of red streaks in sputum, was thought to have ANCA-related vasculitis due to the clinic of hematuria, episcleritis, arthritis and hemoptysis. The desired c-ANCA value was IFA 1/360, ANCA profile Elisa: PR3 was positive. In thoracic CT, there are 3-5 nodular, 3-4 mm lesions in the right lung. There were nodular opacities with ground glass density in both lungs, peribronchial thickening, "inverted halo sign" in the middle lobe of the right lung, and nodular consolidation area in the lower lobe of the right lung, consistent with granulomatous polyangiitis **(Figure 2)**. Renal Doppler ultrasonography shows no evidence of stenosis in the renal arteries, echocardiography is normal. Plethysmography: normal, spirometer: normal. DLCO: normal, PFT with reversibility: severe restriction and obstruction, reversibility positive.

In the skin biopsy performed from the existing rash on the face, fibrinogen accumulation (+) in the vascular wall was detected in the immunofluorescent examination. There was no accumulation of IgG, IgA, IgM, C3, C4, findings consistent with leukocytoclastic vasculitis. Because of the values of 266-501 mg/day in 24-hour urine performed renal biopsy that was evaluated as pauci - immune, crescentric and segmental necrotizing glomerulonephritis, IgG, IgA, IgM, C3, C4 accumulation. The patient was diagnosed with granulomatous polyangiitis. The patient's PVAS before treatment was 7.

Pulse methylprednisolone 15-30 mg / kg / day (max 500 mg / day) and Rituximab 375 mg / m2 were administered for 3 days due to lung involvement. SAM (IV), trimethoprim sulfamethaxazole prophylaxis was started because of acute sinusitis. After trimethoprim sulfamethaxazole, rituximab and

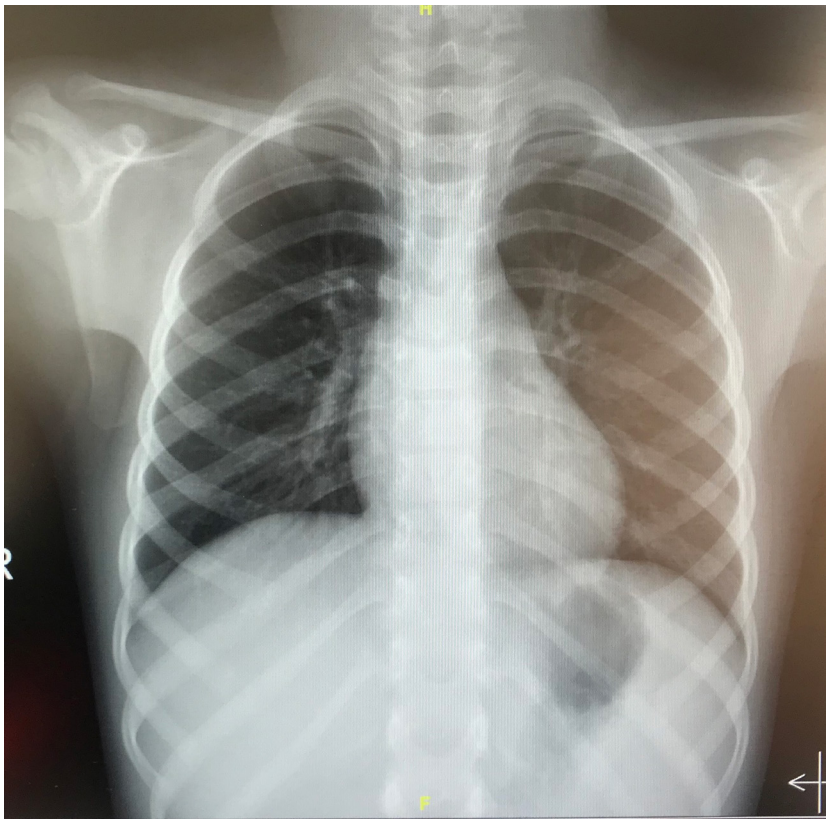

Figure 1: Chest Radiography

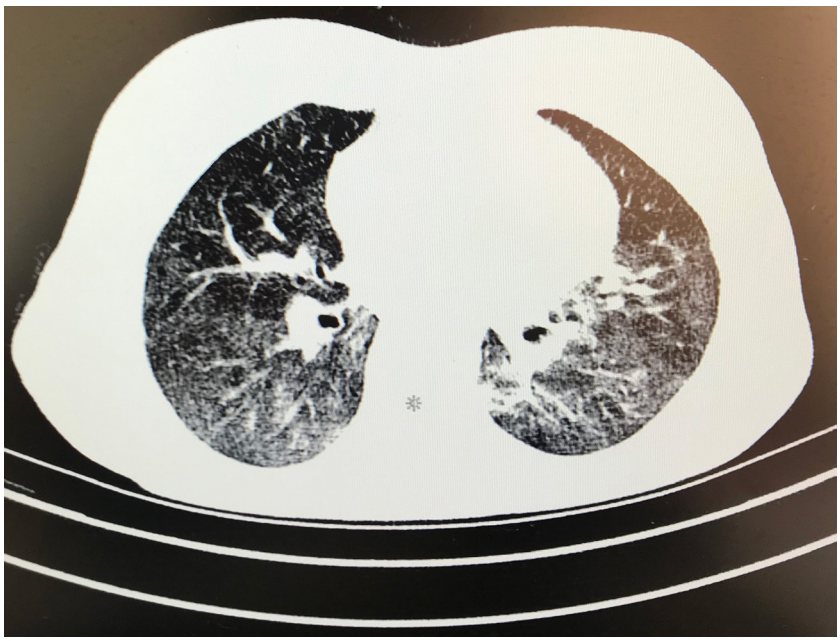

Figure 2: Thorax CT

trimethoprim sulfamethaxazole treatment was interrupted due to the allergic maculopapular rash on the whole body. Because of pauci immune, crescentric and segmental necrotizing glomerulonephritis in renal biopsy, it was planned to give 6 doses of cyclophosphamide 500 mg intravenously every 3 weeks. Rotavirus Ag + was detected in the patient who had a gastroenteritis clinic 3 months later in the follow-up. Atypical pneumonia and pneumocystis jirovecii pneumonia were accepted due to accompanying cough and rhonchus in the right lung on physical examination.

Intravenous SAM and clarithromycin were started. Clinical improvement was achieved in the follow-up. The patient was given a total of 6 doses of cyclophosphomide, 1 dose of rituximab, 6 months of mycophenylate mofetil, 1 year of azothiopurine, a total of 2 years of methylprednisolone 5 mg. Linear

atelectasis in the lobe, inverse halo sign and nodular areas seen on previous CT were evaluated as markedly regressed.

DISCUSSION

Granulomatous with Polyangiitis (GPA) formerly known as Wegener granulomatous (WG) is a multisystemic necrotizing granulomatous vasculitis of unknown cause. The disease mostly involves the upper (sinuses, larynx, and ear) and lower (trachea) airways, lungs, and kidneys. Unlike other vasculitis, the most common and probably the most aggressive location is the lungs [1]. Patients with GPA (WG) may present with airways or pulmonary parenchymal involvement causing hoarseness, cough, shortness of breath, stridor, wheezing, hemoptysis, or pleuritic pain [2]. These symptoms may be accompanied by pulmonary consolidation and pleural effusion. These patients may also develop pulmonary fibrosis and pulmonary arterial hypertension [3]. Largo-tracheo-bronchial involvement may include tracheal or subglottic stenosis associated with stridor. Chest X-ray findings are variable. Common symptoms include nodules, irregular or diffuse opacities, short-term infiltrates, and hilar adenopathy. Pulmonary involvement is one of the main features of the disease. Other organ involvements include the kidneys, skin, peripheral and central nervous system, eyes, heart and gastrointestinal system.

In the 2008 Ankara classification criteria, a child patient with at least 3 (three) reputations out of 6 (six) conditions presented below is classified as GPA [4]:

- Upper airway involvement (chronic purulent or bloody nasal discharge or recurrent epistaxis / crusting / granulomata, nasal septum perforation or saddle nose deformity, chronic or recurrent sinus inflammation)
- Kidney involvement (proteinuria >0.3 g/24h or >30 mmol/mg urine albumin / creatinine ratio, hematuria or red blood cell pulses >5 red blood cells / high power field or red blood cell casts in a spot morning sample) urinary sediment or 2 + on dipstick, necrotizing pauci immune glomerulonephritis)
- Lung involvement (chest X-ray or CT showing the presence of nodules, cavities, or constant leaks)
- Laryngo-tracheo bronchial involvement (subglottic, tracheal or bronchial stenosis)
- ANCA positivity by immunofluorescence or ELISA (MPO / p or PR3 / c ANCA)
- Granulomatous inflammation in the wall of an artery or in the perivascular or extravascular space

c-ANCA positivity, especially with a specificity of 80-100% against Proteinase 3 (PR3) target antigen and a sensitivity of 28-92% at GPA (WG) [3]. PR3-ANCA levels are associated with activity and high titers are generally associated with the risk of exacerbation is considered.

GPA (WG) is fatal in untreated conditions. Traditional induction therapy was cyclophosphamide + corticosteroids. However, recent studies have shown that Rituximab (anti-CD20 antibody) is an effective alternative therapy [5]. Plasmapheresis and intravenous immunoglobulin (IVIG) are used as needed. Once remission is reached, maintenance therapy should be initiated with azathioprine or other recommended immunosuppressives and steroid abatement. The SHARE group recommended prophylaxis treatments to prevent p. jiroveci pneumonia and upper airway recurrence in gpa [6,7].

KEY MESSAGES

- *GPA is one of the ANCA-related vasculitides with predominant lung and kidney involvement, requiring intensive immunosuppressive therapy, and fatal if untreated.*
- *In GPA lung involvement, nodular and cavitary lesions are seen in the foreground.*
- *Diagnosis c-ANCA positivity and clinical criteria must be met.*

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PP-16: Hepatotoxicity Following Cyclophosphamide Treatment in A Case of Newly Diagnosed EGPA

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Eosinophilic granulomatosis with polyangiitis (EGPA) (EGPA; Churg-Strauss syndrome) is a systemic necrotizing vasculitis of small-to-medium-sized vessels characterized by eosinophilia. EGPA typically occurs in patients with preexisting asthma, and involves the skin, lungs, and peripheral nerves. (1) Here, we report and evaluate hepatotoxicity following cyclophosphamide treatment in a case of newly diagnosed EGPA and asthma, considered as having COPD before.

CASE REPORT

A 69-year-old male with a medical history of BPH, rectal cancer (operated, in remission) and CPOD presented to the hospital 9 months ago with the complaint of right drop foot. He notes fatigue and significant weight loss during the past 6 months. White blood cell (WBC) count showed a remarkable eosinophilia of 7450/μL (44,3% of WBC) and the patient admitted to the hospital to investigate hypereosinophilia.

Peripheral blood smear showed significant increase in mature eosinophils. A survey for infectious etiologies associated with eosinophilia revealed a negative Entamoeba histolytica, Toxocara Fascioliasis serologies and stool ova and parasites were unremarkable. Since Immunoglobulin E were elevated and combined with the significant history of allergic rhinitis, it was thought that patient might have an asthmatic component. Pulmonary function test performed and a reversible airway obstruction detected by spirometry (resulting in a ≥ 12% increase in the predicted FEV1) in favor of asthma. Nasal endoscopic examinations indicated the presence of bilateral nasal polyps. CT showed ground-glass density and accompanying nodular opacities at the posterior medial segments of lower lobe in the left lung **(Figure 1)**. His serum tested positive for p-ANCA by indirect immunofluorescence with a titer of 1/320.

A diagnosis of EGPA was made in the patient given his history of eosinophilia, mononeuritis multiplex, paranasal sinus abnormality and asthma. The patient was treated with intravenous methylprednisolone (1 gram per day for 3 days, followed by 48 mg), and cyclophosphamide

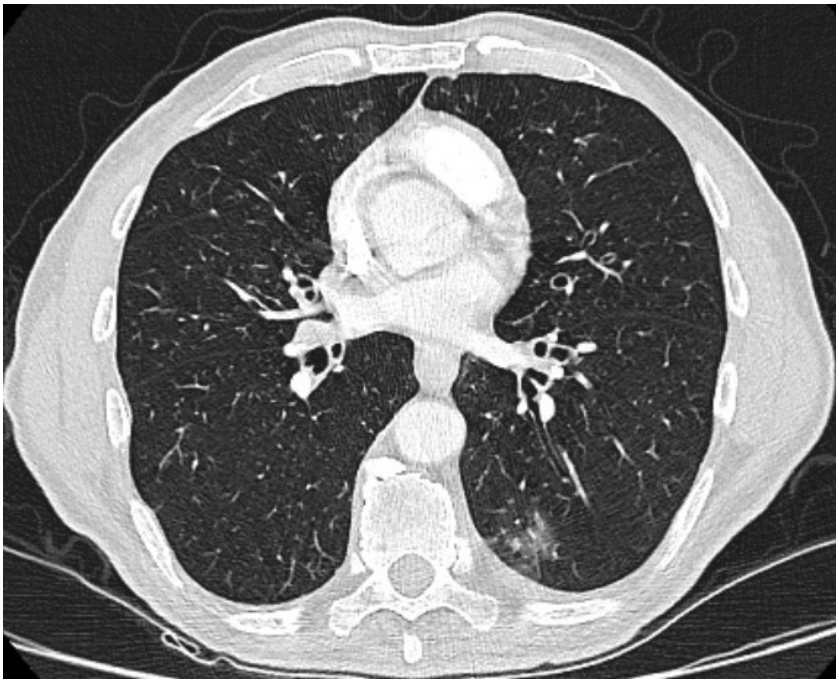

Figure 1: CT showed ground-glass density and accompanying nodular opacities at the posterior medial segments of lower lobe in the left lung.

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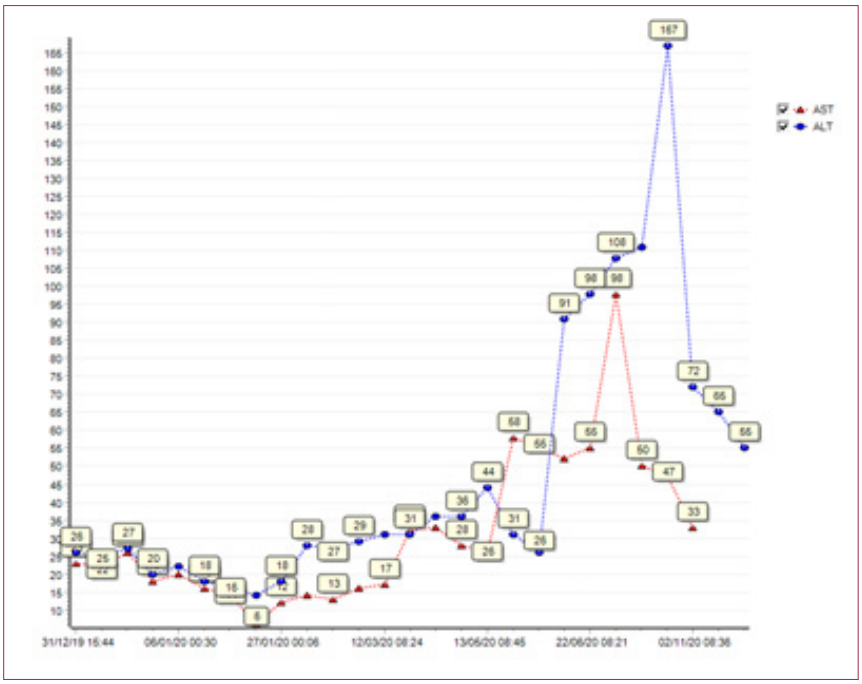

Figure 2: The patient was accepted as CYC-related hepatotoxicity, and switched to mycophenolate-mofetil (MMF) as treatment. The patient's AST and ALT values regressed.

(500 mg every 2 weeks). While he had improvement in his peripheral neuropathy with treatment, increasing ALT AST levels of at least 2-3 times ULN was observed in the 6th month during follow up .

Serological tests for viral hepatitis were all negative. Viral hepatitis, autoimmune liver disease, iron overload, and metabolic liver disorders were all excluded. Echocardiography and Doppler ultrasonography performed for cardiac involvement due to EGPA and portohepatic vascular thrombosis that may affect venous return were found to be normal. Liver biopsy performed to rule out the vasculitic involvement of the liver due to EGPA and showed "acute / subacute hepatocyte injury in Zone3" in histopathological examination. The patient was accepted as CYC-related hepatotoxicity, and switched to mycophenolate-mofetil (MMF) as treatment. The patient's AST and ALT values regressed **(Figure 2)**.

DISCUSSION

Eosinophilic granulomatosis with polyangiitis is a systemic vasculitis characterized by allergic rhinitis, asthma and pronounced eosinophilia in peripheral blood. In 1990, the American College of Rheumatology described the first classification criteria for EGPA. These criteria included six findings: (1) asthma, (2) 10% eosinophils on a complete blood count, (3) mononeuropathy, mononeuropathy multiplex, or polyneuropathy, (4) migratory or transient pulmonary opacities detected radiographically, (5) paranasal sinus abnormalities, and (6) biopsy-confirmed extravascular eosinophilic accumulation around a blood vessel. The sensitivity and specificity rates for the presence of four or more of these criteria yielded from 85.0% to more than 99% [1].

Asthma is the essential clinical manifestation of EGPA and presents 95 to 100% of patients. Asthma COPD may mimic each other clinically due to similar complaints such as sputum, shortness of breath, and cough exclusively in elderly patients [2].

Treatment for antineutrophilic cytoplasmic antibody (ANCA) vasculitides starts with induction of remission to prevent or retard organ involvement. The European Vasculitis Society/European League against Rheumatism (EUVAS/EULAR) group uniformed the definition of remission, which is a no detectable disease activity using a confirmed scoring tool such as BVAS. Cyclophosphamide in addition to high dose steroids are frequently used for induction of remission [3]. Most frequently expected and well-known adverse effects of cyclophosphamide includes gonadal toxicity, increased incidence of infections, drug-induced neutropenia, teratogenicity. Since hepatotoxicity may uncommonly seen as a side effect of CYC, we report this case to help building an increased awareness about such a serious side effect among the rheumatologists [4].

KEY MESSAGES

- *Since COPD and Asthma may cause similar complaints, it is not always possible to clearly differentiate between these obstructive lung diseases. Age of onset, smoking history, reversibility of airflow limitation in PFT, and atopy might be used to distinguish between asthma and COPD* [6].
- *EGPA relies mainly on corticosteroids, with immunosuppressant adjunction for severe disease* [5]. *Cyclophosphamide may cause hepatotoxicity although rarely* [7].

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PP-17: Young Microscopic Polyangiitis (MPA) Patient Presenting with Skin Involvement

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Microscopic polyanginitis is in the ANCA (anti-neutrophilic antibody) -related vasculitis class and progresses with antibody against myeloperoxidase (p-ANCA) [1]. While its incidence increases over the age of 50, the age of onset peaks between the ages of 60-65 [2]. MPA is more common in men than in women, and the male: female ratio is 1.5: 1 [2]. The skin may develop purpura (40%) and less frequently vasculitic skin ulcers [2]. Our case; There are differences among vasculitides in terms of age, gender, form of onset and course.

CASE REPORT

A 39-year-old female patient was admitted to dermatology due to the development of widespread rashes on the back and trunk in 2014. In the follow-up, rheumatology consultation was requested when dyspnea developed with ulcerated, painful and draining wounds that started on the right ankle lateral malleolus and the medial malleolus of the left ankle and then spread to the leg area **(Figure 1a)**. He was taken over with a pre-diagnosis of systemic vasculitis. ESR: 60 mm / hour, CRP: 112 mg / dl, rheumatoid factor, anti-CCP, anti-nuclear antibody, anti-dsDNA negative, Anti-PR3 (c-ANCA) negative, Anti-MPO (p-ANCA)) was detected positive. Ophthalmology, ECHO and other imaging were performed with Ear-Nose-Throat. In the differential diagnosis, infections (viral, bacterial), diabetes mellitus and deep vein thrombosis were ruled out. The patient was diagnosed with MPA when hemorrhagic areas, proteinuria in the urine and microscopic polyangiitis (MPA) were detected in the biopsy of the lesions on thorax CT. Pulsed iv methylprednisolone, iv cyclophosphamide was administered. Plasmapheresis was performed due to pulmonary hemorrhage. However, clinical and laboratory remission was provided with iv rituximab 1000 mg every 6 months (day 0 and day 15), and TMP / SMZ (1x1 tb 2 days a week) was continued with azathioprine in the maintenance treatment of the patient. The patient, who had two children, had another pregnancy during this period and ended with curettage. Mycophenolate mofetil (MMF) and methylprednisolone were started in the patient who developed clinical and laboratory relapse at the end of 2019. Clinical remission has been achieved in the patient, who was diagnosed with MPA at a young age, except for scar lesions on the skin, with MMF **(Figure 1b)**.

DISCUSSION

Vasculitis is a clinicopathological process characterized by inflammation and damage of blood vessels [3]. Vasculitis was first described by Adolf Kusmaull and Rudolf Maier in 1866 with inflammation along

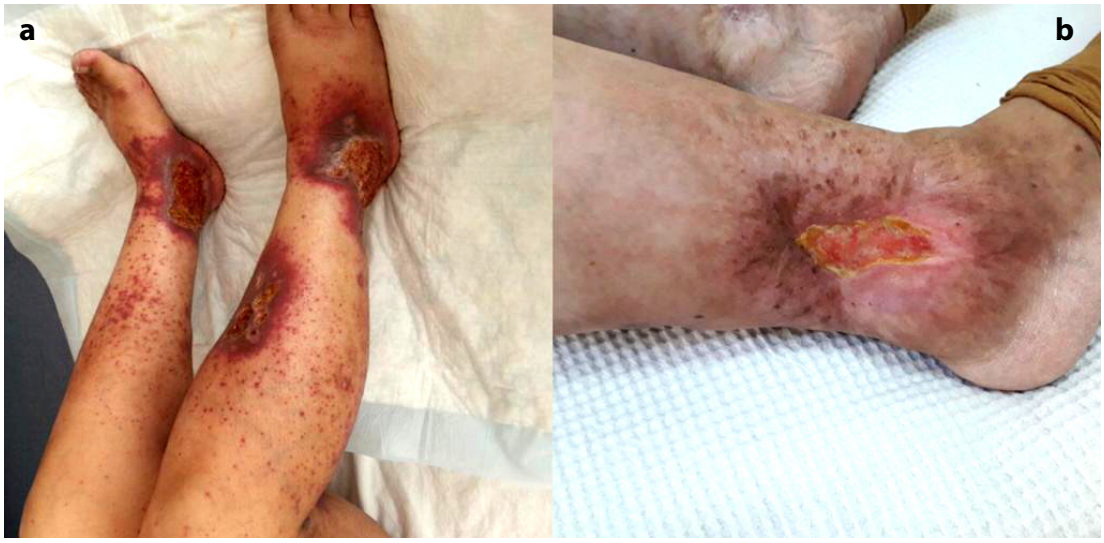

Figure 1: Cutenous lesions

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the medium and small diameter vessel wall in the autopsy of a 27-year-old tailor who suffered from fever, myalgia, abdominal pain and oliguria, and was named "Periarteritis nodosa" [1]. Systemic vasculitis was named in the Chapel Hill Consensus Conference in 1992; Necrotizing vasculitis of small-diameter vessels (capillaries, venules or arterioles) with little or no immune accumulation is called microscopic polyanginitis [3].

While the incidence of microscopic polyanginitis increases significantly over the age of 50, the age of onset peaks between the ages of 60-65 [2]. In the study edited by Marc C. Hochberg, it was reported that the disease developed more frequently between the ages of 65 and 75 [1]. Our case was 39 years old.

Microscopic polyanginitis is slightly more common in men than in women, and the male: female ratio is 1.5: 1 [2].However, Sharon A. Chung and Philip Seo et al. The male: female ratio was reported as 1.8: 1 in the study conducted by [4].

In microscopic polyanginitis, the main organs affected are kidney and lung [2]. The presence of glomerulonephritis and pulmonary capillaritis makes microscopic polyanginitis a life-threatening disease. While participating in kidney disease in 90% of the patients; Purpura development in the skin is at a rate of 40%. Less commonly, vasculitic skin ulcers can be seen [2]. In our case, there was no evidence of proteinuria, hematuria or pulmonary capillarity; ulcers developed on the skin. Sharon A. Chung and Philip Seo et al. While skin involvement is the first symptom in 15-30% of patients in the research conducted by; It is seen in 30-60% of all patients. In addition; It has been suggested that palpable purpura, which is observed in 30-40% of patients with skin involvement, is the most common manifestation among skin lesions. Other lesions include livedo reticularis, nodules, urticaria, and necrotic skin ulcers. [4]. In our patient, the first complaint was determined to be myalgia; Then, palpable purpura developed on the anterior surfaces of the legs. In addition, Sharon A. Chung and Philip Seo et al. Dermatological manifestations were found to be associated with arthralgia [5]. Our case also had arthralgia complaints.

In the blood tests of our case, anti-MPO (p-ANCA), which is an antibody against myeloperoxidase enzyme, was positive. Among the vasculitis in the differential diagnosis, p-ANCA positivity is more common in microscopic polyangiitis and cutaneous PAN; c-ANCA positivity is often seen together with Wegener granulomatosis and Churg-Strauss syndrome [5]. This antibody is a diagnostic test for microscopic polyanginitis. 90-95% of the patients are ANCA positive, approximately 70% of them are MPO-ANCA [2]. This rate is 30-60% in Churg-Strauss Syndrome [6].

According to EULAR 2019 recommendations for the treatment of primary small and medium vessels for vasculitis, the combination of oral or intravenous cyclophosphamide and glucocorticoid is included in the induction treatment with an evidence value of 1A. Despite this initial induction therapy, it is recommended to initiate rituximab treatment for those who cannot achieve remission and have progressive disease. However, plasmapheresis is recommended as evidence level 1B in cases with renal involvement and rapidly progressing crescentric glomerulonephritis. There is no study on the effectiveness of plasmapheresis on extra-renal involvement [7]. Our patient did not have proteinuria in the urine and no impairment was observed in renal functions. However, plasmapheresis was applied to the patient for 5 days because of the widespread deep skin ulcers and necrosis. According to EULAR, low-dose glucocorticoid and azatiopurine, leflunamide or methotrexate are included in the recommendations as evidence level 1B for remission treatment [7]. We administered azatiopurine 100 mg / day and methylprednisolone 4 mg / day as maintenance therapy to our patient. However, due to the lack of sufficient acute phase reactant response in the follow-up of the patient, mycophenolate mofetil 2000 mg / day treatment was started. EULAR recommendations also include the use of mycophenolate mofetil in progressive disease [7].

KEY MESSAGE

- *MPA can be seen in young patients. Immunosuppressive and their combinations to be used in remission, maintenance and relapse treatments of the patients should be selected according to the patient.*

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acta medica

PP-18: A Case of Granulamatosis Polyangitis (GPA) Presented with Hypophysis Involvement

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Granulomatous with polyangiitis (GPA) is systemic, necrotizing vasculitis of small and medium-sized vessels of unknown etiology. Although it mainly affects the upper and lower respiratory tract, nervous system involvement can also be seen. While peripheral neuropathy or necrotizing vasculitis leading to cranial nerve paralysis is the most common manifestation, central nervous system involvement is less common. GPA with pituitary involvement is a rare condition that can cause misdiagnosis. It is an exclusion diagnosis reported in the literature, with both medical and surgical treatment. We present a case who was diagnosed after visual field defect and whose medical treatment continues after transsphenoidal resection.

CASE REPORT

A thirty-one-year-old female, complained of blurred vision in both eyes at the seventh month of her pregnancy. Severe headache occurred seven days after delivery. First, she was admitted to neurosurgery department and bitemporal heteronym hemianopsia was detected. Sella Magnetic Resonance Imaging (MRI) revealed a lesion at the localization of the pituitary gland extending into the 22x12 mm suprasellar cistern with a well-circumscribed hemorrhage **(Figure 1)**. The hormone profile of the patient who did not use any medication and breastfeeding her baby was GH: 3.9 µg/L Prolactin; 141 µg/L, ACTH: 21 ng/L, Cortisol: 8.9 µg/L. Because of the visual field defect, she had surgery. Her pathology was consistent with pituitary apoplexy. Treatment with hydrocortisone, L-thyroxine and desmopressin has been initiated by the endocrinology department.

In the second month of therapy, the patient was admitted to the emergency department with back pain. A mass was detected in the chest radiograph and increased CRP levels with positive c-ANCA, PR3, and RF were found in the laboratory examinations of the patient **(Figure 2)**.

The physical examination of the patient hospitalized with a diagnosis of GPA, revealed arthralgia in the hand, wrist, knee and ankle, vasculitic rash on the anterior leg, conjunctivitis of the eye and oral ulcer. The pathology result in the pituitary operation was reinterpreted and reported to be compatible with GPA. Renal functions were normal. One gram of methylprednisolone (PRD) and 1000 mg cyclophosphamide (CYC) treatment was administered for three days. The patient's complaints regressed and 3 more outpatient CYC cycles were applied. A lumbar puncture was performed on the patient who was admitted

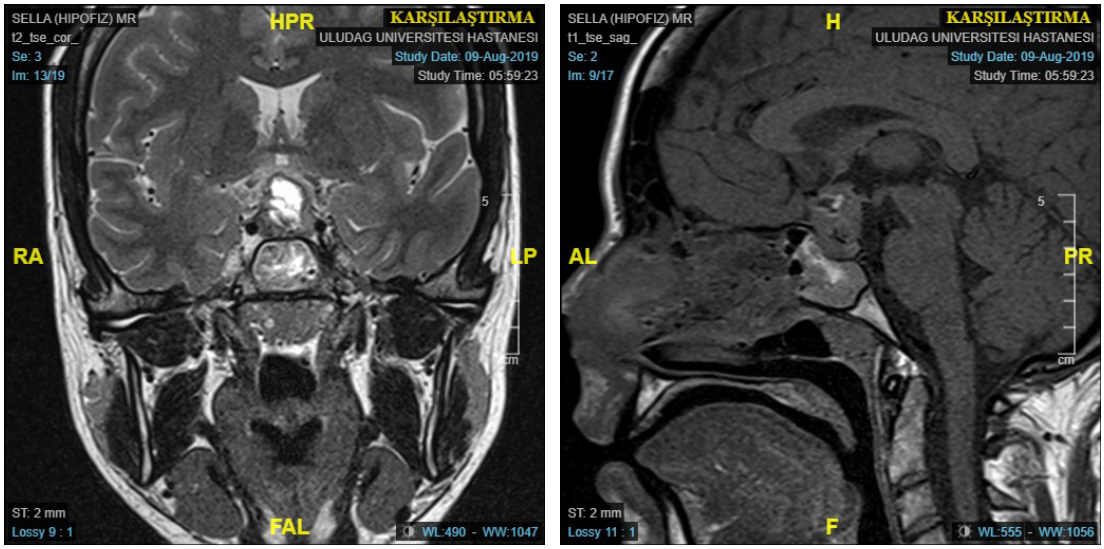

Figure 1: Sella MRI

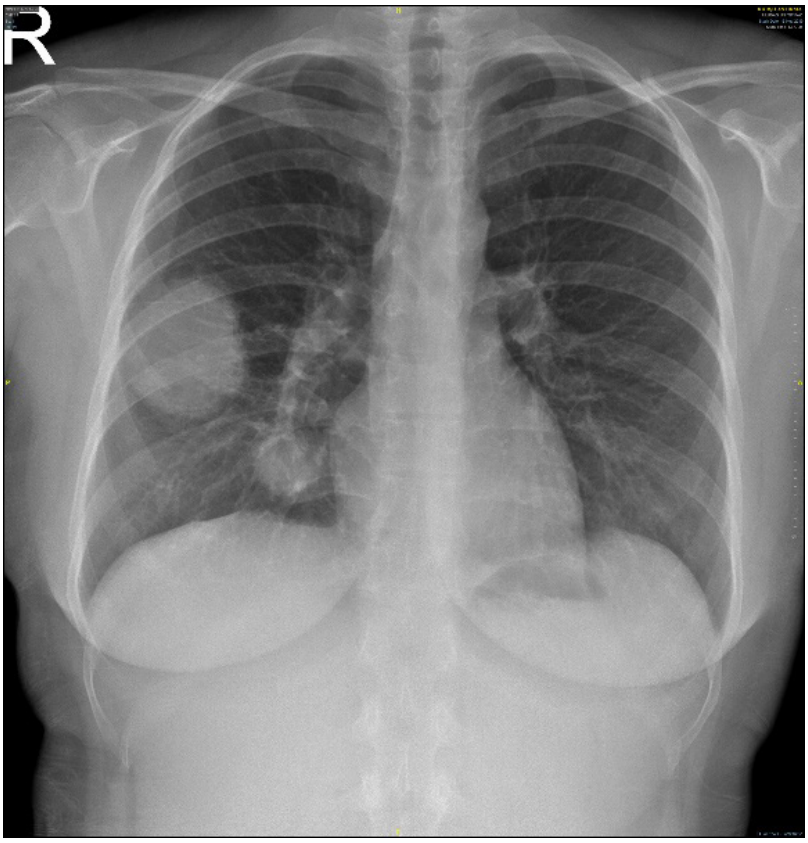

Figure 2: Chest radiograph

to the emergency department again with headache. Intracranial hypertension and infection were ruled out. Pulse PRD, rituximab (RTX), and intravenous immunoglobulin therapy were administered with regard to the activation of the disease. The patient, with continued complaints, was operated for the second time when his cranial MRI reported a 40% increase in his lesions. The complaints of the patient who received the second course of RTX treatment regressed. Her follow-up and treatment continues with low-dose steroid and antibiotic prophylaxis.

DISCUSSION

The pituitary gland involvement is rarely seen in GPA. Pituitary dysfunction symptoms can be nonspecific, such as headache and vomiting. Such a clinical presentation and insufficient awareness of the rare pituitary involvement of GPA may cause delays in the diagnosis of pituitary involvement in patients with GPA. Therefore, the prevalence of pituitary involvement is considered probably higher than known [1]. Pituitary involvement is seen in approximately 1% of all GPA patients. Three pathogenic mechanisms have been suggested to explain the pituitary involvement: vasculitis, granulomatous formation in the pituitary, or granulomatous invasion from adjacent organs such as ear, nose and throat, ocular and meninges [1].

Pituitary involvement can occur at any time before or after another organ involvement occurs. In most cases, there are signs of active disease in other areas or may still occur despite good control of the disease in other organs. As in our patient, few cases initially diagnosed with pituitary involvement [1-2]. In a literature review, it was observed that the pituitary involvement occurred in 15.7% of patients without other organ involvement at the time of diagnosis, at the time of diagnosis with other organ involvement in 31.3% and after another organ involvement in 49% [3].

GPA patients with pituitary involvement frequently complain of headache, vomiting and visual field defects; Polyuria, polydipsia, amenorrhea, galactorrhea, and decreased libido can be seen with symptoms of hormone secretion, suggesting that the tissues around the pituitary are compressed [1].

Concerning the treatment of pituitary dysfunction GPA, available information is limited. Corticosteroids and CYCs can be given in immunosuppressive therapy. RTX has been shown to be beneficial in

severe GPA unresponsive to CYC therapy. However, some patients with progressive disease may need pituitary resection surgeries to relieve granuloma pressure. Enlarged pituitary glands may shrink after immunosuppressive therapy, but hormone therapy requirements may continue [1,3].

Since the first complaint of our patient was blurred vision and headache, the diagnosis was delayed accordingly. After the diagnosis, a second operation was performed when he had complaints despite corticosteroid and CYC treatment. Uneventful treatment continues with RTX treatment.

KEY MESSAGES

- *Pituitary gland involvement is a rare symptom in GPA patients. Pituitary involvement can be seen in isolation before other organ involvement, with other organ involvement or after diagnosis.*
- *There is no consensus on the best treatment strategy for GPA pituitary. Surgical intervention may be required in patients resistant to corticosteroids, CYC and RTX treatments.*

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acta medica

PP-19: Granulomatosis with Polyangiitis and Hidradenitis Suppurativa: A Rare Co-Occurence

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Granulomatosis with polyangiitis (GPA) is a vasculitis which is systemic, necrotizing, granulomatous and associated with anti-neutrophil cytoplasmic antibodies (ANCA). Hidradenitis suppurativa (HS) is a chronic inflammatory skin disease, characterized by recurrent painful nodules and abscesses, commonly in apocrine bearing areas, such as the axilla and groin. HS is not common and has been reported mainly with two groups of disorders; autoinflammatory disorders and a group with folliculopilosebaceous structural disorders and hyperkeratosis. HS has been reported in association with various inflammatory disorders such as pyoderma gangrenosum, arthritis, familial Mediterranean fever and inflammatory bowel diseases. HS is rarely seen in vasculitis course and their co-existence is only seen as case series. As an uncommon co-existence, the GPA case with the co-existence of GPA and HS, is presented here.

CASE REPORT

43 years old male patient with a lesion with necrotic malodour on the front side of the right tibia sought medical service in our polyclinic. In his medical history it has been reported that he visited another medical center with arthritis and cough which occured two months ago, and that he was redirected to our center after investigations identifying C-ANCA positive and his thorax computerized tomography (CT) localizing a pleura based lesion in the superior segment of the lower lobe of the left lung. There were constitutional symptoms like fever, weight loss, night sweats. He had a story of cough, sputum, dyspnoea, hemoptysis. There were a 4 cm x 4 cm sized running lesion with necrotic malodour in the right tibia and running lesions in both of the armpits and groin.

Laboratory tests identified Hg:10 mg/dL, Urea: 28 mg/dL, Cr:0,81 mg/dL, AST:18 U/L, ALT:12 U/L, Ca:9,5 mg/dL, CRP:92 mg/L, sedimentation:77 mm/hour, ANA, RF, Anti-CCP negative, c-ANCA 1/32, PR3 1/10 positive. Protein was in trace amount in his full urinalysis. Spot urine test identified a 0.25 protein. A nonhomogenous lesion of 4 cm with a regular boundary in the adjacency of hilar region has been identified in his postero-anterior chest radiography. CT wasn't repeated since it was performed recently in another medical center.

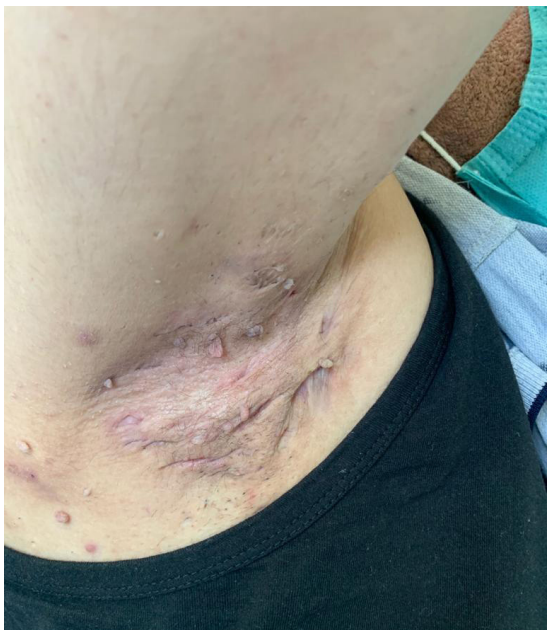

Figure 1: Armpit lesions compatible with HS

Figure 2: Open wound on the front side of the right leg

1 gr of cyclophosphamide, 1 gr of methylprednisolone for 3 days were given with the diagnosis of GPA. The legions in the axillary and ingunial region were evaluated as HS by the dermatology clinic. His treatment has been changed by the infectious diseases clinic because of the growth in the culture of wounds. Piperacillin- tazobactam treatment has been stopped and the treatment has been kept on with ceftazidime-metronidazole. Rifcap and clindamycin were given for HS by the suggestion of the dermatology clinic. Needle biopsy has been performed to the mass which was seen in the thorax CT; the result has been interpreted as a "necrotizing granulomatous inflamation". GPA induction treatment cyclophosphamide has been extended to 3 gr. Acitretin has been added for his HS treatment by the dermatology clinic. Tapering the dose of cyclophosphamide down to 500 mg with adding adalimumab to the treatment has been decided in the council performed with the dermatology clinic. It was seen in the follow-up that the open wound on the front side of the leg closed up. The lesions in armpits and groin closed and the running regressed. The monitoring and the treatment of our patient is still on in our policlinic.

DISCUSSION

There is a limited number of case series in the literature, presenting GPA and HS co-occurence. Alavi et al. remarked 2 cases to indicate HS and GPA co-occurence in their published study of 5 cases series. It was reported that the cases had pulpuric skin lesions, pulmonary involvement, and Anti-Proteinase 3 (PR3)-ANCA positivity and as in our case, they presented with hemoptysis [1].

Skin lesions occur approximately in 50% of the GPA patients. The most frequent lesions seen are the palpable purpura. Papule, nodule, ulcerative lesion, and skin lesions as livedo reticularis might be seen and mainly in the lower extremity [2].

It is known that TNF-a, IL-1 and IL-17 have a part in the HS pathogenesis. The recognition of skin lesions has importance on account of its changing the treatment alternatives. As in our patient, the use of adalimumab has been demonstrated to be beneficial in the HS treatment, in the literature, too [3].

Adalimumab has been added to the treatment of our patient of whom there was no regression in his running lesions with cyclophosphamide. His lesions regressed and there wasn't any side effect monitored in his follow-up. Cyclophosphamide and adalimumab combination can be carefully used in the selected cases for the GPA and HS co-occurence.

KEY MESSAGES

- *HS must be evoked among the lesions which might be seen in the course of GPA,as in our case.*
- *Immunosuppressive and biological agents can be used together but carefully for the co-occurence of HS and GPA.*

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acta medica

PP-20: A Case of Eosinophilic Granulomatous Polyangitis Presenting with Vasculitic Rash

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Eosinophilic granulomatous polyangiitis (EGPA) is a necrotizing, granulomatous, associated small vessel vasculitis that involves the skin, peripheral nerves and lungs, characterized by allergic rhinitis, asthma, and peripheral eosinophilia. We aimed to present an EGPA case presenting with vasculitic rash in this case.

CASE REPORT

A thirty-eight-year-old female patient applied to dermatology due to a fingertip wound and did not benefit from the treatment given. She applied to our center in June 2018 with the complaints of cough, weakness and dyspnea. Eosinophilic pneumonia was considered because of peripheral eosinophilia, chronic bronchitis changes in bronchoscopy, and patchy acinar lesions in both lungs in thoracic tomography. Hematological pathologies were excluded by performing bone marrow biopsy due to peripheral eosinophilia. The patient, who was followed up with steroid treatment from the polyclinic for chest diseases, was diagnosed with asthma and allergic rhinitis during follow-up. In October 2019, when she was re-hospitalized by chest diseases department due to pneumonia. MPO and p-ANCA positivity was detected in her examinations and she was admitted to our service. Lesions on the fingertips were considered vasculitic rash. In blood analysis; Hg 9.2 mg / dL, Eosinophil 47%, WBC: 20700 K / µL, Urea: 36 mg / dL, Cr: 0.75 mg / dL, Ca: 9.3 mg / dL, C reactive protein (CRP): 25 mg / L, sedimentation: 95 mm/ hour, ANA negative, ANA Profile Negative, p-ANCA positive, mpo 1/10 positive. Polyneuropathy was found in the EMG performed due to numbness in the fingertips. Exudative eosinophlic infiltration was detected in the nasal mucosa biopsy. The patient with allergic rhinitis, asthma, peripheral eosinophilia, extravascular eosinophil infiltration and neuropathy was accepted as EGPA. Cyclophosphamide 1 g and for three days methylprednisolone 500 mg were given . Afterwards, her treatment was continued with 1 mg / kg / day oral prednisolone reduction scheme. Trimethoprim-sulfometaxasol was started prophylactic

Figure 1: vasculitic rash on the second and third fingers of the right hand

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three days a week. After the cyclophosphamide treatment was completed to 3 g, maintenance treatment was continued with rituximab. Peripheral eosinophilia and infiltrates on chest radiography regressed. Follow-up of the patient continues by our polyclinic.

DISCUSSION

Common findings in the clinical presentation of EGPA: asthma (91-100%), upper respiratory track involvement (48-75%), peripheral neuropathy (55-72%) pulmonary involvement (65-91%), skin involvement (40-%) 52), cardiac involvement (27-35%), renal involvement (27%), gastrointestinal involvement (23-32%), central nervous system involvement (5-9%) [1]. In our case, the most common findings of asthma, allergic rhinitis, peripheral neuropathy, eosinophilic pneumonia, and vasculitic rash were presented.

According to data from 1,184 patients with ANCA-associated vasculitis (AAV) in 130 centers worldwide, cutaneous symptoms were common in all AAV subtypes: GPA (223/656 or 34%), MPA (85/302 or 28%), and EGPA (106/226 or 47%). The most common skin manifestation of ANCA-associated vasculitis is petechia / purpura seen in 181 patients (15%) [2]. Similar to the literature our case also had petechial rash.

KEY MESSAGE

- *ANCA-associated vasculitis is rare; They are serious and life-threatening diseases that can present with different organ involvement. EGPA should be kept in mind in the differential diagnosis of cases evaluated with skin rash, pneumonia, and peripheral eosinophilia.*

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acta medica

PP-21: Granulomatosis with Polyangiitis Presenting with Hearing Loss And Facial Paralysis

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Granulomatosis with Polyangiitis (GPA) is a rare vascular inflammatory disease especially affecting the respiratory tract and kidneys. Otorhinolaryngologic symptoms are mostly the initial symptoms, but may occur late in the disease course. We introduce a severe case of GPA with lung involvement and hemoptysis due to delayed diagnosis that started with hearing loss and facial paralysis.

CASE REPORT

A 52-year-old-male presented with fever, cough, hemoptysis for 6 months. He was diagnosed with GPA following investigations for the complaints and had a history of intensive-care-unit follow-up for 1 month and treated with cyclophosphamide (3 gr), pulse steroid, 15 sessions of plasmapheresis. Following discharge, he admitted with worsening of symptoms and massive hemoptysis.

He mentioned that the first symptom was spontaneously regressed hearing loss 7 months ago. Recurrence of hearing loss with right facial paralysis occurred 5 months ago. Physical examination was non-revealing but bilateral pretibial pitting edema.

On laboratory investigations, neutrophilic leukocytosis, Hb:8,1,CRP:195,anti-PR3:>200 were detected. Thorax CT showed bilateral cavitary lung lesions, bronchiectasis, bilateral pleural effusion (Figure 1). Bronchoscopy and biopsy were planned and biopsy interpreted as active chronic inflammation with granulation formation. Bronchoalveolar lavage were positive for multiresistant Pseudomonas Aeruginosa and negative for tuberculosis and fungal infection. Cranial MRI showed mastoiditis, pansinusitis. On EMG examination, 93% axonal damage was seen in the right facial nerve. The patient is consulted with department of ENT and evaluated as bilateral mixed hearing loss and right peripheral facial paralysis. Hearing aids and elective facial nerve decompression were recommended.

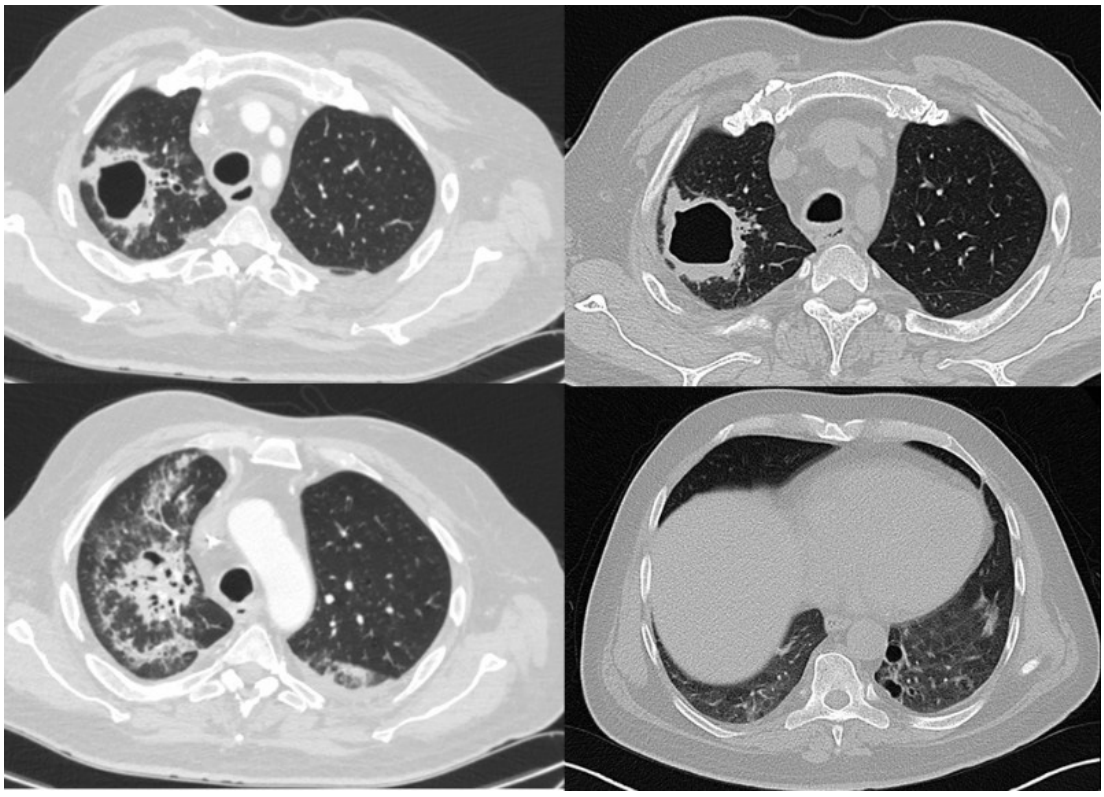

Figure 1: Thorax CT showing multiple cavitary lung lesions

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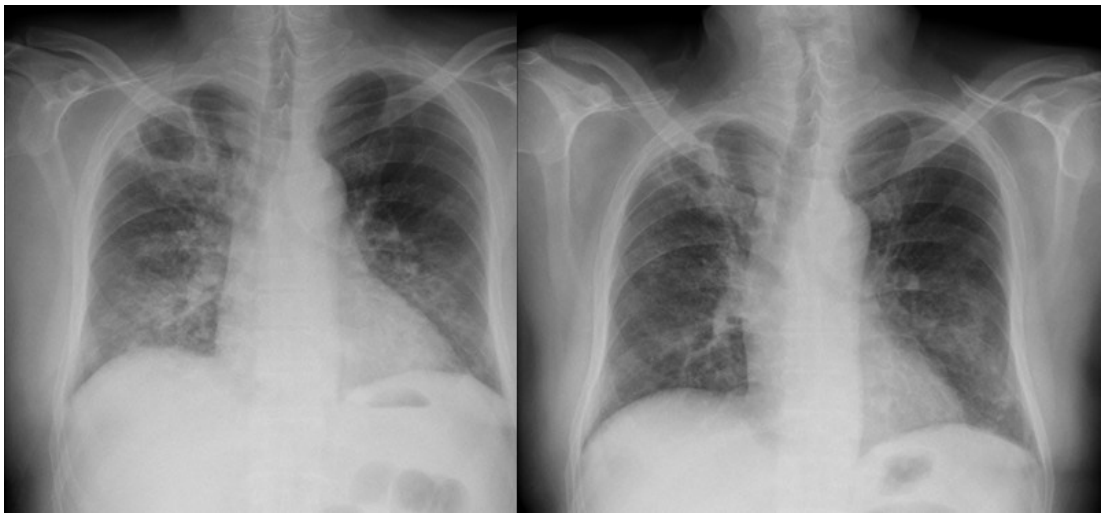

Figure 2: Pre-(left) and post-(right) treatment chest radiographs

High CRP levels were decreased with antibiotherapy, physical therapy for facial paralysis were started. Rituximab (1000 mg, two times with interval 14 days), pulse steroid (1gr, 5 days), 7 sessions of plasmapheresis and fourth dose of cyclophosphamide were applied. Clinical and radiographic improvement were seen **(Figure 2)**. Patient is still under follow-up.

DISCUSSION

GPA may present first with ENT symptoms (73-99%) including hearing loss, otitis media, vertigo, recurrent sinusitis [1]. Otologic symptoms like mastoiditis, otitis media, vertigo, hearing loss are reported in 35% of patients with GPA [2]. Nerve compression by granuloma and local vasculitis are described as pathophysiological mechanisms [1]. Facial paralysis is rare and seen in 5% of cases [1]. The underlying pathology is thought to be necrotizing vasculitis of facial nerve vasa nervorum [3]. The effective treatment is immunosuppressive agents including cyclophosphamide, glucocorticoids, and rituximab (in resistant cases) [1]. Our aim is to emphasize that GPA should be kept in mind in the differential diagnosis of cases with head and neck complaints, in order to avoid delayed diagnosis, as seen in our case.

KEY MESSAGES

- *ENT symptoms including hearing loss and facial paralysis may be the first manifestation of GPA.*
- *Correct interpretation of symptoms is crucial to prevent rapid progression of disease due to misdiagnosis.*

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