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Image in ER

Superior Vena Cava Syndrome

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A 65-year-old male with multiple co-morbidities including diabetes, hypertension, chronic obstructive pulmonary disease, previous ischemic stroke, chronic kidney disease and ischemic heart disease came with gradual puffiness of eyes and redness of face that has been going on for a month but exacerbated in last one week. The patient was referred from medicine clinic to ER for further evaluation. His picture is shown in figure 2.

On further inquiry, he had exertional dyspnea with productive cough, dysphagia, hoarseness of voice, orthopnea, head fullness and paroxysmal nocturnal dyspnea. He was unable to finish sentences and had severe bouts of cough limiting his physical activity. He had no associated complaints of fever, blood in sputum, chest pain, or any limb swelling. His baseline labs were sent along with a chest X-ray which showed a large soft tissue density in right hilar and peri hilar region as shown in figure 3.

CT Scan without contrast (figure 3) was done (due to increased creatinine) which showed a large, confluent, multinodular, mediastinal mass on the right-side encasing and severely narrowing the superior vena cava. Enlarged mediastinal, right supraclavicular, and right hilar nodes were also noted. Right upper lobe of lung was collapsed and mild right sided effusion with areas of ground glass opacification were seen. The case was diagnosed as superior vena cava (SVC) syndrome secondary to a mediastinal mass which was causing the facial plethora and symptoms of dyspnea and dysphagia. The patient was admitted and planned for radiotherapy and further investigation.

This was an interesting case as even though patient had classical symptoms[1] of superior vena cava syndrome, he was diagnosed only when he started to have facial plethora. Increase in venous pressure causes cerebral edema (manifested as headache, confusion, head fullness), edema of larynx or pharynx (leading to dyspnea, dysphagia, cough) and edema of the neck and arms.[2] Most common causes of SVC syndrome is malignancy (60%) with intravascular devices such as Port-a-Cath and dialysis catheters being the most common among benign causes.[3] It becomes an oncological emergency if there are signs of airway compression.[4] Radiotherapy, chemotherapy and endovascular stents are few of the management options.[5] Recognition of signs and symptoms of superior vena cava as a spot diagnosis is an important learning point in clinical setting. The diagnosis can further be confirmed on examination and investigations.

REFERENCES

1. Cohen R, Mena D, Carbajal-Mendoza R, Matos N, Karki N. Superior vena cava syndrome: A medical emergency? Int J Angiol. 2008; 17(1):43-46.

2. Wilson LD, Detterbeck FC, Yahalom J. Superior Vena Cava syndrome with Malignant Causes. N Engl J Med. 2007 May; 356: 1862-69.

3. Rice TW, Rodriguez RM, Light RW. The Superior Vena Cava Syndrome: Clinical Characteristics and Evolving Etiology. Medicine. 2006 Jan; 85(1): 37-42.

4. Wudel LJ, Nesbitt, JC. Curr. Treat. Options in Oncol. 2001 Jan; 2(1): 77-91 https://-doi.org/10.1007/s11864-001-0019-3.

5. Wan JF, Bezjak A. Superior vena cava syndrome. Emergency Medicine Clinics of North America. 2009 May; 27 (2):243-255

Figure 1

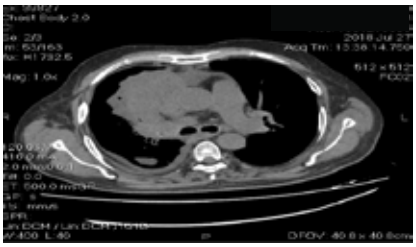

Figure 2

Figure 3