



Pemberton's Sign

Neil Keshvani*, Christina Yek and David H Johnson

Department of Internal Medicine, University of Texas Southwestern Medical Center, USA

Clinical Image

A 52-year-old previously healthy man presented to the Emergency Department after a syncopal episode. He endorsed a history of fatigue and lightheadedness. Physical examination revealed mild neck and facial swelling (Figure 1) but was otherwise unremarkable. Upon elevating his arms above his head, he developed more noticeable facial edema and pronounced facial erythema (Figure 2). CT of the chest revealed a 6.9 x 4.7 x 5.8 cm craniocaudal mass in the right mediastinum that occluded the superior vena cava (SVC). A biopsy of the mass subsequently demonstrated metastatic renal cell carcinoma. This eponymous physical exam finding – Pemberton's sign – was first reported by Dr. Hugh Pemberton in 1946 and is characterized by facial plethora and venous engorgement with bilateral arm elevation [1]. This phenomenon is attributed to clavicular movement causing a "nutcracker" effect that compresses major venous structures [2]. This exam finding is a clinically simple and yet underutilized maneuver that is helpful in revealing SVC obstruction.



Figure 1: Mild neck and facial swelling.

OPEN ACCESS

*Correspondence:

Neil Keshvani; Department of Internal Medicine, University of Texas Southwestern Medical Center, Dallas, Texas, USA,

E-mail: neil.keshvani@phhs.org

Received Date: 17 Jul 2017

Accepted Date: 10 Sep 2017

Published Date: 12 Sep 2017

Citation:

Keshvani N, Yek C, Johnson DH. Pemberton's Sign. *Ann Clin Case Rep.* 2017; 2: 1435.

ISSN: 2474-1655

Copyright © 2017 Neil Keshvani. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Figure 2: Elevating his arms above his head, he developed more noticeable facial edema and pronounced facial erythema.

References

1. Pemberton HS. Sign of submerged goitre. *Lancet.* 1946; 248: p509.
2. De Fillippis EA, Sabet A, Sun MR, Garber JR. Pemberton's sign: explained nearly 70 years later. *J Clin Endocrinol Metab.* 2014; 99: 1949-1954.