



A Case Report of Contained Rupture with Pseudo Aneurysm Formation- A Rare Entity

Lokesh Rana^{1*}

Preyender Thakur²

Pooja Gurnal³

Sudir Yadav⁴

Inderjeet Chauhan⁴

Padam Negi⁴

Akshay Sharma⁴

Tanay raghuvanshi⁴

¹Assistant Professor, Department of Radio-diagnosis, Dr RPGMC, Kangra at Tanda, Himachal Pradesh, India

²Assistant Professor, Department of Endocrinology, Dr RPGMC, Kangra at Tanda, Himachal Pradesh, India

³Senior resident, Department of Anaesthesia, DRPGMC, Kangra at Tanda, Himachal Pradesh, India

⁴Resident, Department of radiodiagnosis, DRPGMC, Kangra at Tanda, Himachal Pradesh, India

Abstract

A 66 year old male presenting with chest pain and shortness of breath gradually increasing for past 2 months, CECT was done which shows presence of contained rupture of arch of aorta with pseudo aneurysm formation.

Case Report

We present a case of a 66 year old male presenting with chest pain and shortness of breath gradually increasing for past 2 months CECT images shows aortic aneurysm in ascending and arch with peri-aortic soft tissue with focal discontinuity in the intimal wall calcification with formation of saccular pseudo aneurysm. There is also presence of pericardial effusion and bilateral pleural effusion. VR images also denote the same. Diagnosis is contained rupture with pseudo aneurysm formation. Such entity was rare to be encountered in day to day practice (Figure 1).

A 66 year old male presenting with chest pain and shortness of breath gradually increasing for past 2 months CECT images shows aortic aneurysm(black arrow) in ascending and arch with peri-aortic soft tissue with focal discontinuity in the intimal wall calcification with formation of saccular pseudoaneurysm (white arrow). There is also presence of pericardial effusion and bilateral pleural effusion. VR images also denote the same. Diagnosis is contained rupture with pseudo aneurysm formation.

Discussion

Contained rupture with pseudo aneurysm formation Rupture of thoracic aorta is an emergency requiring immediate diagnosis and management; however contained rupture diagnosis is often delayed due to chronicity and atypical clinical presentation [1,2].

Clinical presentation

Patients usually present with chest pain however symptoms are sometimes masked.

Presenting age is 60-70 years with slight male predominance, concomitant hypertension, CAD and PVD are present in most cases [3-5].

Key imaging diagnostic clues [1,4-6]

1. Decreased thrombus to lumen ratio
2. Focal discontinuity of intimal calcification
3. Tangential calcium sign
4. Periaortic stranding

Differentials

- Non-ruptured aneurysm-Increased thrombus to lumen ratio, Intact intimal calcification
- Ruptured aneurysm-Along with diagnostic features of contained rupture additional

Features are extravasation of contrast, high attenuating crescent and draped aorta sign [1,2,6].

Article Information

DOI: 10.31021/ijcmc.20202130
Article Type: Case Report
Journal Type: Open Access
Volume: 3 Issue: 2
Manuscript ID: IJCMC-3-130
Publisher: Boffin Access Limited

Received Date: 26 December 2019
Accepted Date: 08 January 2020
Published Date: 09 January 2020

*Corresponding author:

Lokesh Rana

Assistant Professor
Department of Radio-diagnosis
Dr RPGMC, Kangra at Tanda
Himachal Pradesh, India
E-mail: poojalokesh2007@gmail.com

Citation: Rana L, Thakur P, Gurnal P, Yadav S, Chauhan I, et al. A Case Report of Contained Rupture with Pseudo Aneurysm Formation- A Rare Entity. Int J Clin Med Cases. 2020 Jan;3(2):130

Copyright: © 2020 Rana L, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 international License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

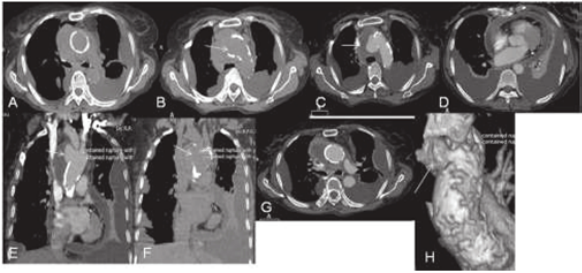


Figure 1: A 66 year old male presenting with chest pain and shortness of breath gradually increasing for past 2 months CECT images show aortic aneurysm (black arrow)

References

1. Rakita D, Newatia A, Hines JJ, Siegel DN, Friedman B. Spectrum of CT findings in rupture and impending rupture of abdominal aortic aneurysms. *Radiographics*. 2007 Mar;27(2):497-507.
2. Bechara-Zamudio L. Nontraumatic rupture of thoracic aorta: delayed treatment under local anesthesia. *Texas Heart Institute Journal*. 2013;40(5):577-580.
3. Butler P, Mitchell AW, Ellis H. *Applied radiological anatomy*. Cambridge University Press. 1999 Oct;14.
4. Sutton D. *Text Book of Radiology and Imaging*. Churchill Livingstone. London. 2003;2:1453-1487.
5. Adam A, Dixon AK, Gillard JH, Schaefer-Prokop C, Grainger RG, et al. *Diagnostic Radiology E-Book*. Elsevier Health Sciences. 2014 Jun 16.
6. Haaga JR, Boll D. *Computed Tomography & Magnetic Resonance Imaging of the Whole Body E-Book*. Apr;180(4):1033-1035.