ejpmr, 2022,9(2), 504-508

SJIF Impact Factor 6.222

EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Case Report

ISSN 2394-3211

EJPMR

ACUTE AORTIC EMERGENCIES

Dr. Medha Kaith, *Dr. Rajesh Kumar, Dr. Raman Deep, Dr. Suresh Thakur and Dr. Ajay Alhuwalia

Department of Radio-Diagnosis IGMC Shimla.

***Corresponding Author: Dr. Rajesh Kumar**

Department of Radio-Diagnosis IGMC Shimla.

Article Received on 21/12/2019 **Article Revised on 11/01/2022** **Article Accepted on 01/02/2022**

INTRODUCTION

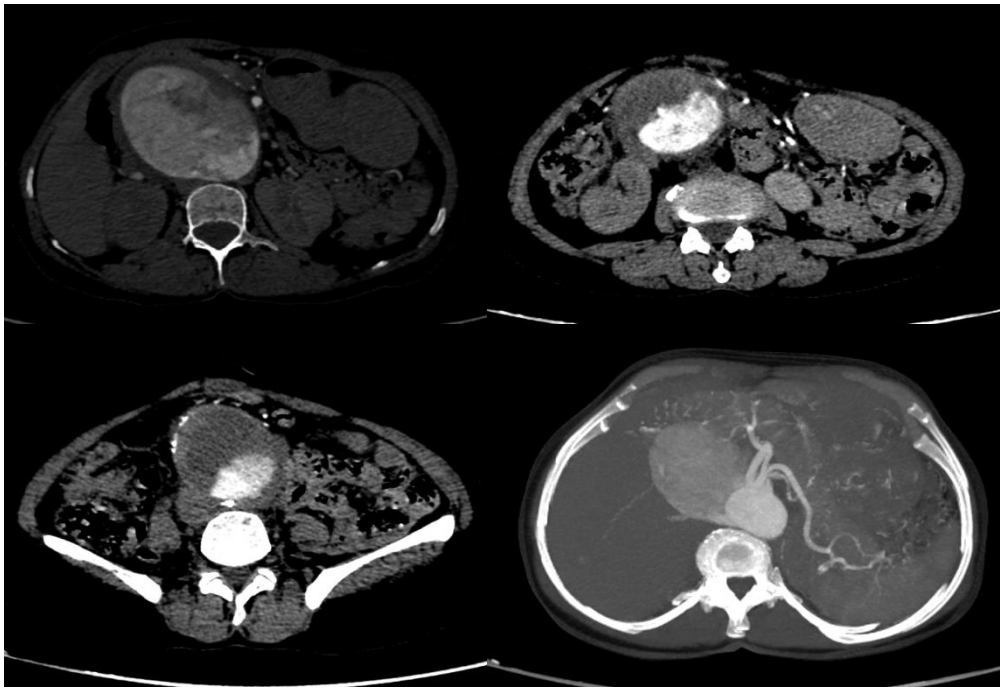
Acute aortic syndromes and emergencies are relatively uncommon but arelife threatening with potentially fatal complications. Prompt and accurate diagnosis of these entities significantly influences prognosis and guides therapy. Radiology plays an important role in diagnosing acute aortic diseases with contrast enhanced computed tomography angiography (CTA) being the most rapid and robust imaging technique.

CASE REPORT 1

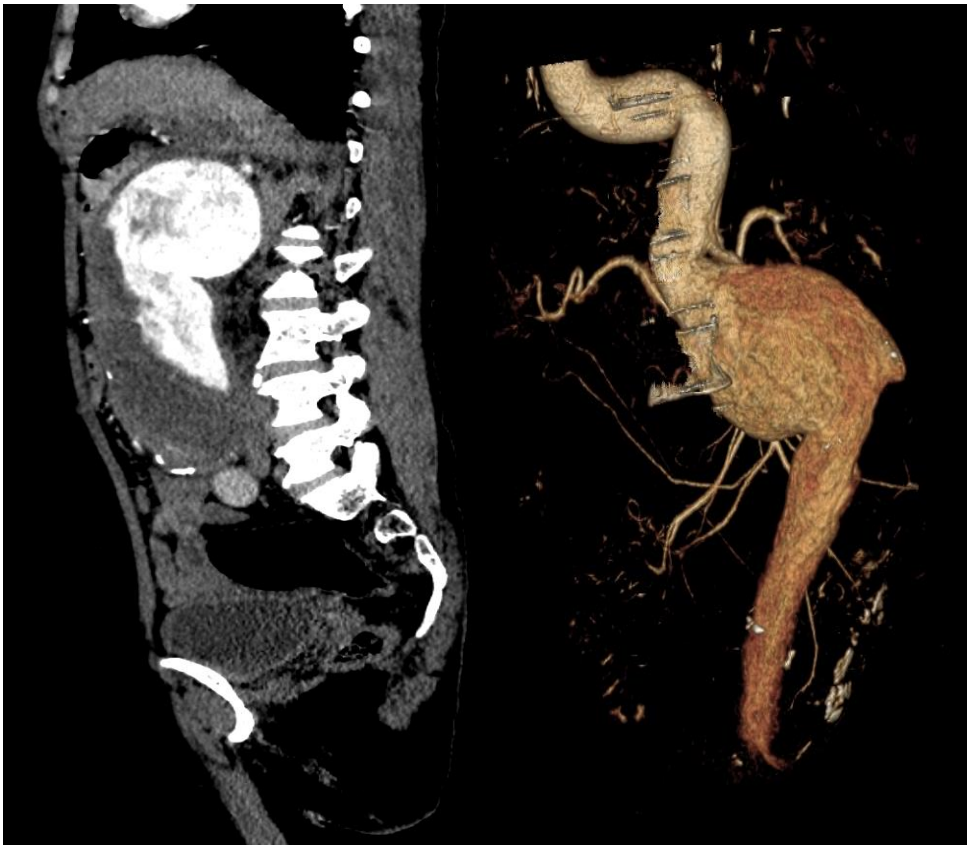
55 years old female
Presented with acute pain abdomen since 1 day.

On examination: Pulsatile,non tender abdominal lump in right parasagittal location was felt.

CTA: Infrarenal abdominal aortic aneurysm with partial thrombosis and intramural haemorrhage in thrombus s/o impending rupture.



CASE

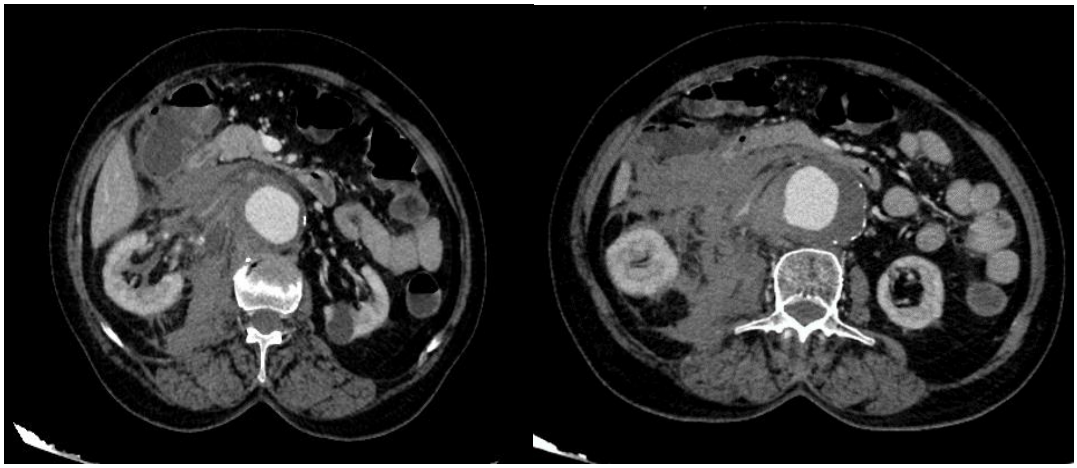


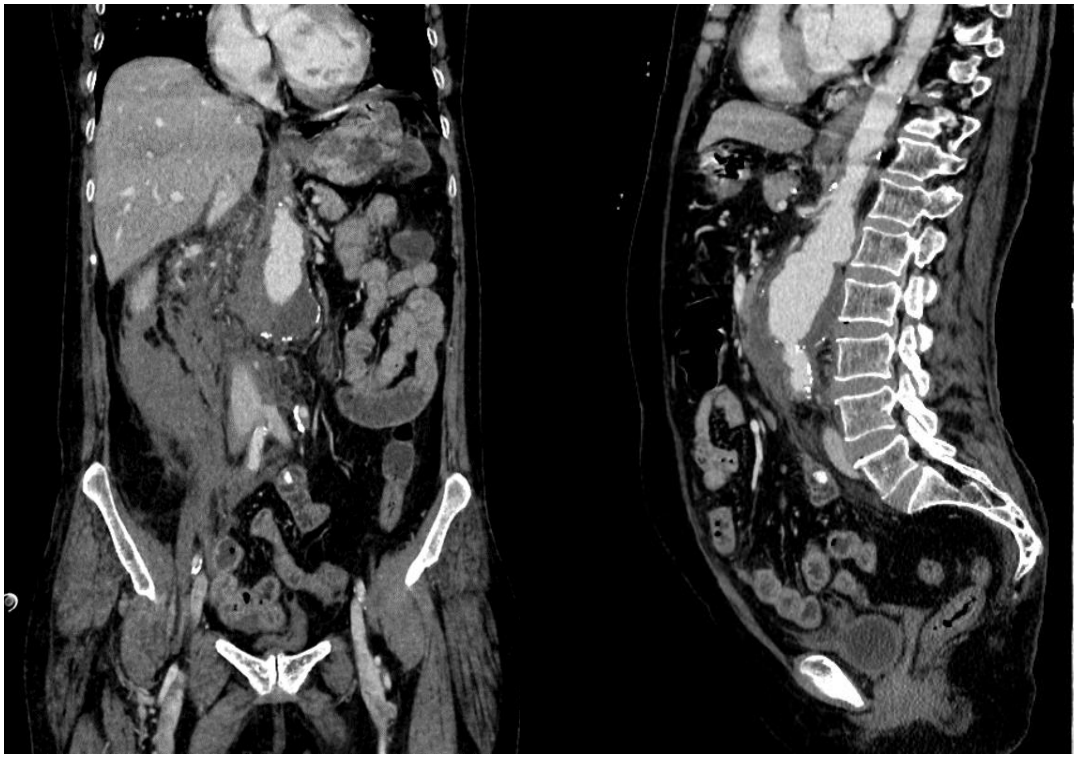
Imaging findings showed Infrarenal Abdominal aortic aneurysm due to atherosclerosis with partial thrombosis and intramural haemorrhage in thrombus s/o IMPENDING RUPTURE.

CASE REPORT 2
72 years old female

Presented with severe pain abdomen since 1 day.
Patient was in shock at the time of examination(BP-90/50 mm of Hg).

CTA findings
Aneurysmal dilatation of abdominal aorta with circumferential thrombus with luminal irregularity.





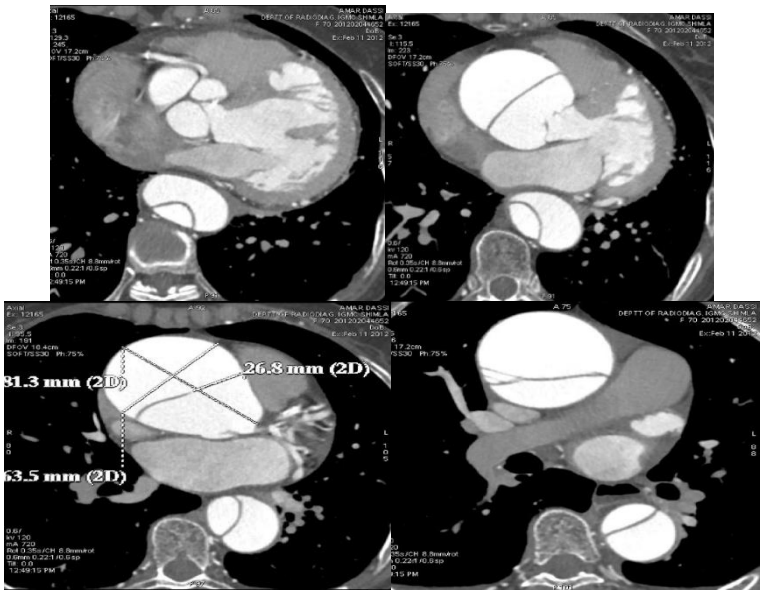
Imaging findings showed aneurysmal dilatation of abdominal aorta with circumferential hypodensity s/o thrombus with thrombus to lumen ratio .66 with luminal irregularity.

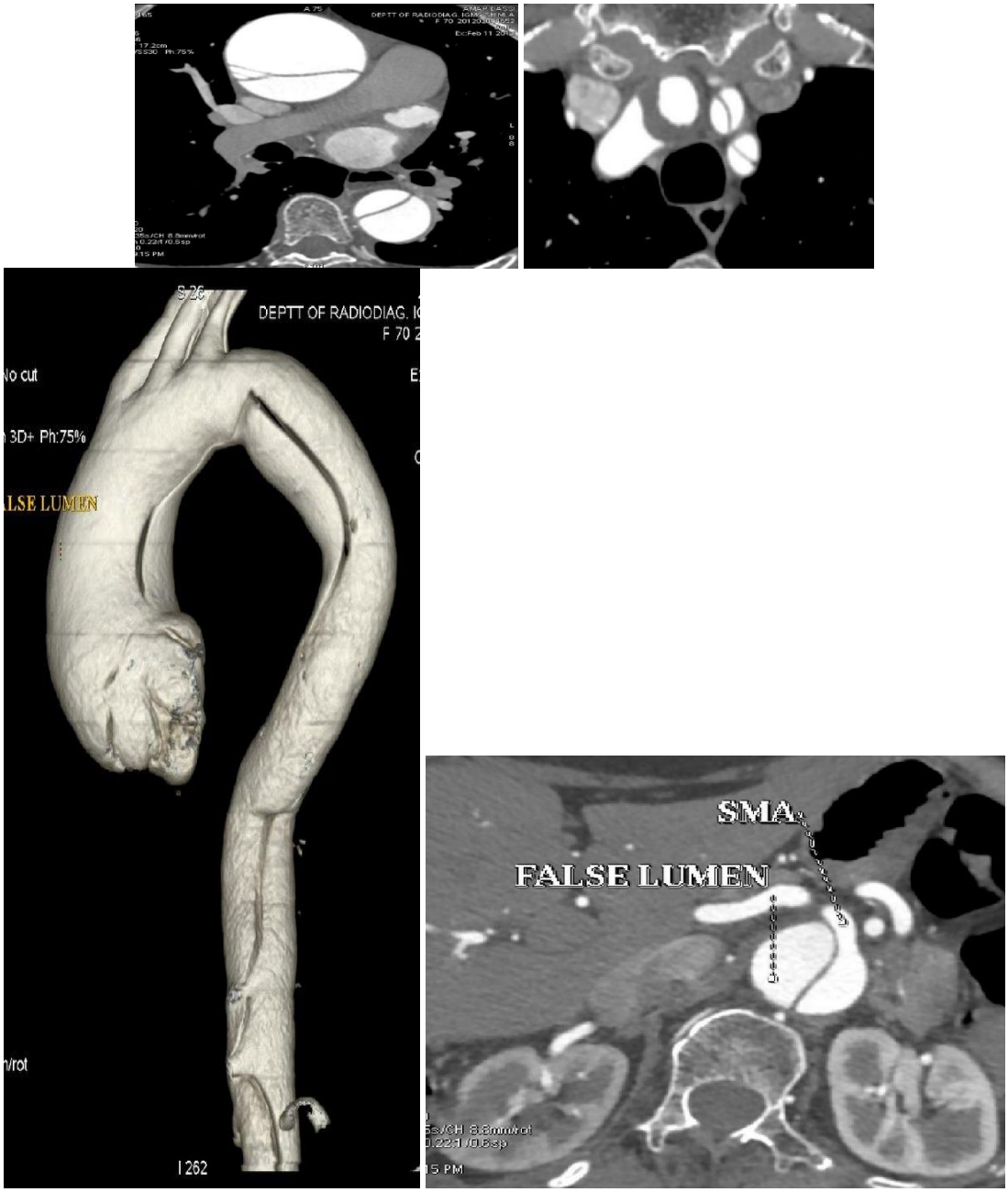
Discontinouity in calcification on posterolateral aspect with nippling on right side with hyperattenuating crescents on right side s/o hemorrhage.

Hyperdense fluid collection was seen in the retroperitoneum on right side –s/o contained rupture.

CASE REPORT 3

70 years old female.Presented with chest pain since 7 days , HTN (180/100 mm of Hg).CT Angiography : Aneurysmal aortic dissection involving the ascending aorta,arch of aorta, descending aorta,right brachiocephalic trunk, left CCA, left SCA, right CIA, EIA and right renal artery.





Imaging findings showed Aneurysmal aortic Dissection Involving Ascending Aorta, arch of aorta, descending aorta, right brachiocephalic trunk, left CCA,left SCA, right CIA ,right EIA, right renal artery .

CASE REPORT 4

60 years old male.

Presented with the chief complaint of episodes of syncope.

ECG findings were normal.

Further work up with CT Angiography was performed which showed sinus of valsalva aneurysm of the right coronary sinus with rupture into the Right Ventricular Outflow Tract.

Imaging findings shows saccular outpouching arising from left anterior portion of the right coronary sinus.

A tubular tract is seen arising from the anterior margin of this outpouching and extending into the Right Ventricular Outflow Tract. No contrast extravastion is seen in the MPA and Right ventricle. No pericardial or extracardial fluid is seen.

DISCUSSION

Acute aortic emergencies include life threatening conditions like aortic dissection, aortic aneurysms with impending or contained rupture and sinus of valsalva aneurysm with rupture into the right ventricular outflow tract.

The risk of fatal aortic rupture in patients with untreated aortic dissections or impending rupture is approximately 90 % therefore timely detection is very important.

Computed tomography because of its speed and wide availability is currently the most common diagnostic imaging method for the study of acute aortic emergencies.

CONCLUSION

CT Angiography is reliable in diagnosing and grading aortic trauma, measuring aortic diameter in aortic aneurysm and detecting vascular wall pathology in acute aortic syndrome and aortic inflammation. It is the imaging method of choice and helps to decide whether elective, urgent or emergent treatment is necessary with EVAR and open surgical repair as the main treatment approaches.

REFERENCES

1. Baliyan V, Parakh A, Prabhakar AM, Hedgire S. Acite aortic syndromes and aortic emergencies. Cardiovascular diagnosis and therapy, 2-18 Aprl; 8(Suppl 1): S82.
2. Multidetector CT of Thoracic Aortic Aneurysms *March RadioGraphics, 2009; 29: 537-552.*