Abstract: Abdominal aortic aneurysms in the infrarenal aorta are the commonest of all the arterial aneurysms. Ruptured aortic aneurysm is a surgical emergency and carries a very high risk of mortality and morbidity irrespective of the site of aortic aneurysm. Most patients usually die before they are operated upon. In an abdominal aortic aneurysm, a contained rupture refers to blood outside the aneurysm sac that is confined to the retroperitoneal space, tamponaded by the surrounding tissues. A free rupture refers to bleeding into the peritoneal cavity, without tamponade. This is a case of ruptured, inflammatory infrarenal abdominal aortic aneurysm with a ruptured iliac artery aneurysm. Though, ruptured inflammatory aneurysms are not rare, this case is being presented for its rarity as the patient was a known case of IVC thrombosis and was on anticoagulation for the same.

Ruptured aortic aneurysm causing IVC compression has been reported, but ruptured aortic aneurysm in a known case of IVC thrombosis has not been reported in literature. This case was operated and managed successfully at our institute and the patient is on a 2 year post op follow up.

Keyword: iliac aneurysm, IVC thrombosis

Ruptured aortic & iliac aneurysm, Inferior Vena Cava thrombosis.

CASE REPORT:

38 year old gentleman presented to the emergency room in a state of shock. Patient had complaints of diffuse abdominal pain and pain in his right thigh for the last one week. Pain was dull aching type, history of constipation for the last 2 days. Pain radiates to back with no specific aggravation or relieving factors for the pain. No similar episodes previously. Patient had been diagnosed with Inferior Vena Cava thrombosis and was on treatment with oral anticoagulant drugs. Previous work up for hypercoagulable states were negative. Family history- no similar history in the family.

On Examination:

Patient was in shock. Pulse rate: 105 beats /minute, BP: 80/60 mm Hg, feeble peripheral pulses. Pallor+ Systemic examination: P/A: distended , absent bowel sounds with 6x7 cms pulsatile mass occupying the epigastric, right lumbar and umbilical areas.

Right upper thigh was swollen in the with a bruise in the inguinal region, 5x6 cms pulsatile mass in the area of the inguinal region. CVS: S1 S2 heard, no added sounds or murmur. RS: Bilateral Air Entry present, no wheeze/crepts. CNS: No focal neurological defect. Patient was resuscitated in the emergency room with intravenous fluids and blood products. After making the patient hemodynamically stable, CT angiogram was done which showed ruptured Rt iliac aneurysm and a contained rupture of aneurysm in the infrarenal aorta.

CT ANGIOGRAM

Patient was then taken up for emergency laparotomy, i.e ruptured aneurysm repair with endoaneurysmoraphy and aorto rt femoral lt iliac bypass. Perioperative period was uneventful, patient had acceptable blood loss during surgery and post operative recovery was good. Sac and blood culture were negative. Patient was restarted on oral anti coagulants and discharged on day 8.

Histopathology:

Gross section: aortic wall 3x3 cms with thrombus 1x1 cm. Microscopy: granulomatous inflammation with macrophage infiltration, proliferation of the intima, destroyed media with adventitial fibrosis.

Patient is on a two year follow up and doing well, with a functioning graft on CT angiogram.

FOLLOW UP CLINICAL PICTURE POST OPERATIVE
POST OPERATIVE CT ANGIOGRAM

Discussion:

Definition:
An aneurysm is defined as a focal dilatation of an artery that exceeds the normal diameter by at least 50%. Large elastic arteries are especially prone for aneurysmal degeneration. The abdominal aortic aneurysm (AAA) is the most common type of arterial aneurysm, with an estimated prevalence of 5% to 16% in men older than 65 years. Atherosclerotic or degenerative aneurysms are the commonest types aneurysm.

Inflammatory aneurysm though not rare especially in younger people can present with rupture at the initial presentation.

Inflammatory ruptured aneurysm in a preexisting case of IVC thrombosis which was managed successfully has not been reported in literature.

This case is hence published for its rarity and successful management.

Conclusion:
This case is probably the first reported in world literature and hence it's a case "SUI GENERIS" meaning one of its kind.

References:
6) Rutherford's text book of vascular surgery