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A CASE OF PELVIC PSEUDOANEURYSM WITH LOWER LIMB PARESIS

Radiodiagnosis

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ABSTRACT

Pelvic pseudoaneurysms when large can cause mass effects & lead to signs and symptoms referable mass effects. Here, we are presenting a case of pelvic peudoaneurysm presenting with lower abdominal heaviness & left lower limb paresis.

KEYWORDS

Pseudoaneurysm, IIA, Mass Effects, Greater Sciatic Foramen

Introduction:

Pelvic pseudoaneurysms can arise from any of pelvic arteries. Causes are usually trauma, post-operative & infection-inflammation. Pseudoaneurysms result from defect in arterial wall and their sac is lined not by all layers of vascular wall. Depending on vessel of origin these can present with variable symptoms & signs. When small and asymptomatic may remain undetected or detected incidentally. Large lesions usually manifest due to mass effect. Some lesions can manifest as bleeding per rectum, haematuria, or in case of females abnormal bleeding per vaginum. Different treatment options are available, currently favoured being endovascular therapy/embolization.

Case Report:

A 25 year female patient presented with gradually progressive lower abdominal heaviness, left lower limb paresis & pain for 6 months. In view of lower abdominal symptoms, USG abdomen was done. USG revealed large pseudoaneurysm with surrounding large haematoma in pelvis. Uterus could not be delineated on USG. Urinary bladder was also compressed and minimally distended. There was also bilateral moderate hydroureteronephrosis. Subsequently, non-contrast as well as contrast enhanced CT study was done for detailed evaluation. CT study revealed large enhancing patent pseudoaneurysm in pelvis on left side originating from proximal part of left internal iliac artery (IIA). Pseudoaneurysm was surrounded by large heterodense non-enhancing mass suggestive of haematoma filling almost entire pelvis, and compressing pelvic structures – UB, uterus & rectosigmoid. IIA of other side was normally visualized. Haematoma was extending till presacral region with erosion of anterior aspect of upper sacral vertebrae & L5 vertebra, with extension of haematoma into sacral foramina. Extension of haematoma to left gluteal region via greater sciatic foramen was seen. CT also revealed bilateral hydro ureteronephrosis due to compression of lower ureters.

In view of imaging findings, patient was enquired about symptoms other than lower abdominal heaviness, left lower limb paresis & pain, and she told she was also having constipation & frequency of micturition. No complain of abnormal bleeding per vaginum. No complain of haematuria or bleeding per rectum. Patient did not give any history of trauma. Only surgical history was caeserian section 1 year back. No history of treatment for any significant infective disease

At time of admission patient was anaemic - Hb 6.1g/dl, PCV 20%, MCV 65 fl, MCH 19 pg, MCHC 29 g/dl.

Patient was referred to higher center for further management.

DISCUSSION:

Pelvic pseudoaneurysms are uncommon, have been reported in patients of all ages and both genders. Most of cases are due to trauma, surgical complications & infection-inflammation. In women, uterine artery pseudoaneurysm is a rare but important complication of cesarean delivery and is an often reported cause of pelvic pseudoaneurysm. Among pelvic pseudoaneuryms, internal iliac artery (IIA) pseudoaneuryms are mostly posttraumatic or post-operative. [3,4] There are also case reports of IIA pseudoaneurysms seen post-caeserian.[2] In our case, there was no history of trauma. Only surgical history available was that of caeserian section 1 year back and that was apparently uneventful. No history of treatment for significant infective aetiology.

Pseudoaneurysms can undergo rupture, can cause compression of adjacent structures, and can get infected. [4] Internal iliac artery pseudoaneurysm causing sciatica have been reported in literature. This happens when pseudoaneurysm itself or associated haematoma is extending to greater sciatic foramen. [6] In our case extension of surrounding haematoma to left gluteal region via greater sciatic foramen was noted. Internal iliac artery pseudoaneurysms can also present bleeding per rectum. [3] In our case there was no bleeding per rectum.

Among other mass effects, our patient was also having bilateral hydroureteronephrosis, with UB & uterus compressed anteriorly & to right. Recto-sigmoid was compressed to right side.

Erosion of adjoining bones have been reported in cases of long standing pseudoaneurysms and in cases of chronic contained rupture of aortic aneurysm. Bone erosions are due to pressure effects/pounding nature of pseudoaneurysms causing ischemia. In cases of bone erosion, underlying neoplastic or infective aetiology need to ruled out. [5] In our case, there was erosion of multiple sacral vertebrae & L5 vertebra with haematoma closely apposing these sites. There was no feature suggestive of neoplastic disease or infective aetiology.

As far as treatment is concerned, preferred option is endovascular treatment in form different types of coil embolization & stent graft. Surgical treatment may be needed in complex cases. [2]

Conclusion:

Pelvic pseudoaneurysms can go undetected for long time and may come to notice while patient is undergoing clinical & radiological evaluation for symptoms and signs arising due to mass/pressure effects caused by large size.

Figure Legends

Figure-1. Axial non-contrast (a) & contrast enhanced (b) CT images through pelvis showing large patent pelvic pseudoaneurysm surrounded by large haematoma, with extension of haematoma via left greater sciatic foramen to gluteal region.

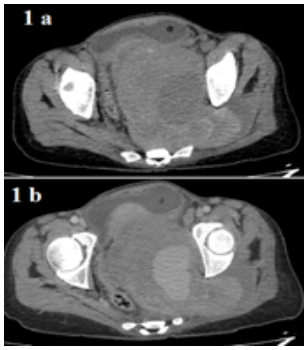

Figure-2. Coronal reformats of non-contrast (a) & contrast enhanced (b) CT study showing patent pelvic pseudoaneurysm surrounded by large haematoma. Also noted hydroureterone phrosis due to mass effect.

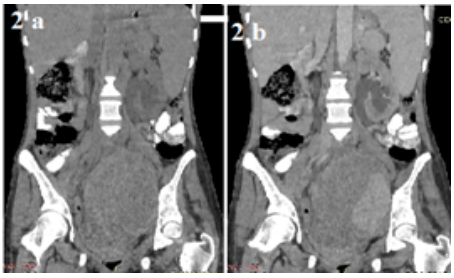

Figure-3. Coronal reformats of non-contrast (a) & contrast enhanced (b) CT study showing patent pelvic pseudoaneurysm surrounded by large haematoma, with extension of haematoma via left greater sciatic foramen to gluteal region.

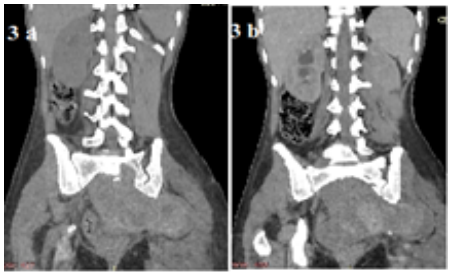

Figure-4. Sagittal reformats of CT study showing erosion of sacral vertebrae by haematoma.

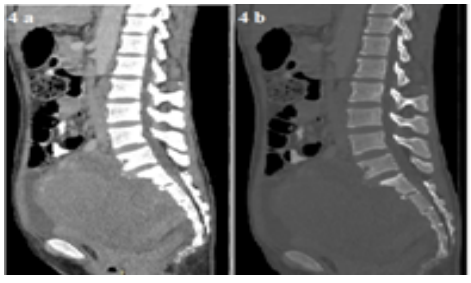

Figure-5. MIP image showing origin of pseudoaneurysm from left internal iliac artery.

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