RARE CASE OF ISOLATED INTERNAL ILIAC ARTERY PSEUDOANEURYSM PRESENTING WITH RUPTURE. SUCCESSFUL ANGIOEMBOLIZATION USING COILS AND HISTOACRYL GLUE

Raza Sayani, Nauman Al Qamari, Anwar Saeed, Mohammad Ali
Department of Radiology, Agha Khan University Hospital, Karachi, Pakistan.

CASE REPORT

We report a case of 65-year-old lady who presented with fever and left flank pain for 35-40 days and was found to have large collection on MRI spine, this was associated with partially thrombosed pseudoaneurysm of left internal iliac artery and deep venous thrombosis of left lower leg vessels which were better appreciated on contrast enhanced CT scan. DVT was managed by inferior vena caval filter as patient could not be anticoagulated and pseudoaneurysm was embolized using coils and glue. Later collection was drained by pigtail catheter placement. Patient responded well and discharged uneventfully.

ABSTRACT

We report a case of 65-year-old lady who presented with fever and left flank pain for 35-40 days and was found to have large collection on MRI spine, this was associated with partially thrombosed pseudoaneurysm of left internal iliac artery and deep venous thrombosis of left lower leg vessels which were better appreciated on contrast enhanced CT scan. DVT was managed by inferior vena caval filter as patient could not be anticoagulated and pseudoaneurysm was embolized using coils and glue. Later collection was drained by pigtail catheter placement. Patient responded well and discharged uneventfully.

Introduction

Isolated internal iliac artery pseudoaneurysms are rare, these may progress to rupture. Cause of collection should be sought where possible as catheter placement without embolization could have resulted in loss of tamponade and excessive bleeding. Successful embolization was performed using coil and histoacryl glue. In third world country with limited recourses, glue is successfully used thus keeping the cost under better control.

Case Presentation

A 65 yrs old woman was admitted in our institution with complaint of left flank pain and fever for last 35-40 days. She was known case of diabetes, hypertension, osteoarthritis and hyperthyroidism. She had blood pressure of 130/60 mm Hg. Heart rate of 90b/min. Respiratory rate of 18 /min and temperature of 99°F. Her MRI and CT scan were performed at other hospital which showed large loculated fluid collection seen in the left psoas muscle and peri-renal region. It measured 9.6 x 7.8 x 6.4 cms. This was associated with partially thrombosed pseudo aneurysm of left internal iliac artery. DVT in left lower limb was managed by inferior vena caval filter insertion as patient could not be anticoagulated. Other differential in our case may be Psoas abscess leading to pseudoaneurysm formation. However our patient did not have any abnormality in the spine. Collection drained was hemorrhagic and didn’t show Acid fast Bacilli on culture. Patient was referred to interventional radiology for endovascular embolization. Through the right femoral artery access, initially left internal iliac arteriogram performed which revealed a pseudo aneurysm arising from its proximal segment, also involving its bifurcation. Initially coils were deployed in the distal segments of the internal iliac artery branches and this was followed by coils in proximal segment. Due to short segment of internal iliac artery at origin deployment of further...
coil was not possible so small amount of histoacryl glue with lipoidal was used to embolize it successfully. This procedure was followed by catheter placement in psoas collection.

Figure 1: Post Contrast coronal CT images showing pseudoaneurysm from left internal iliac artery (Black arrow). Left common iliac artery (Thick White arrow). Collection (Thin white arrow)

Discussion

Internal iliac artery (IAA) pseudoaneurysms are commonly associated with Abdominal aortic aneurysms. Isolated ones are rare with large autopsy series showing prevalence of 0.008% - 0.03%.\textsuperscript{1,2} Atherosclerosis is the most common cause; other causes include trauma, infection, excessive athletic effort, and connective tissue disorders.\textsuperscript{3} Natural course of IAA is progressive expansion to rupture. Amongst the infection the; S. aureus and streptococcus species seems to be the most common causative agents for IAA.\textsuperscript{4-8} Treatment option vary from proximal as well as distal coils embolization, coil packing and stenting depending on the origin of aneurysm and anatomy.\textsuperscript{9,10,11} Each coil placement increases the cost of procedure which needs to restricted many a times in third world countries considering the cost and non-affordability issues. Histoacryl glue needs technical expertise because of liquid nature however a small quantity may suffice to embolize the abnormal vessel effectively and a low cost.\textsuperscript{12,13}

Conclusion

Isolated pseudoaneurysm of internal iliac artery may occur and present with rupture. Cause of collection should be sought where possible to prevent any
disaster. Alternative methods of embolization should be known.

References


