Case Report

Abdominal hidradenoma a D/D of RIF pain

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Clinical Presentation
A 58 year old lady known diabetic for 10 years on insulin, presented to the medical emergency department with complaints of right sided abdominal pain, dysuria, vomiting and decreased urine output for a period of 4 days. On examination she had a lump in the region of the right iliac fossa. She was referred to the department of radiology for further investigation.

Imaging Findings
Ultrasound examination was done and showed right emphysematous pyelonephritis with perinephric extension. Mild right hydroureteronephrosis with DJ stent insitu. Minimal ascites. Left kidney and urinary bladder were normal and showed no abnormality. RIF (right iliac fossa) evaluations showed appendix to be normal, not distended and no inguinal lymphadenopathy noted.

Evaluation of the right lower quadrant in the region of the lump, showed a well defined mixed echotexure subcutaneous lesion [measuring 4.4 x 3.3 x 1.7cm] {Fig 1}. The lesion showed significant vascularity, small foci of calcification and presence of cystic areas were noted within. There is no deeper extension of the lesion to the underlying muscle. Differentials of soft tissue sarcoma and desmoid tumour were given and tissue diagnosis was suggested.

Treatment and Outcome
Biopsy was performed and the specimen was sent for microbiology and histopathology analysis. Wide excision of the infected lesion was done which revealed infacted tissue showing basaloid cells giving the possibilities of appendage tumor. {Fig 2a, 2b}. 
Fig 1: Ultrasound done in the region of the right lower quadrant shows a well defined mixed echotexure subcutaneous lesion [measuring 4.4 x 3.3 x 1.7cm] in the region of the RIF.

Fig 2 a, b: Histopathology analysis showing basaloid cells giving the possibilities of appendage tumor.

Fig 3a, 3b: Gross pathology specimen of the tumor

Discussion
Nodular hidradenoma was described first by Liu in 1949.[1] It is also known as nodular/ clear cell/solid or cystic hidradenoma. It is a asymptomatic benign tumor, usually less than 2 cm in size and is often covered with intact skin.[2] Commonly it is located in head and extremities, the uncommon sites are eyelid and breast scalp, face, anterior trunk and extremities.[3,4] This tumour can occur at any age, but is most commonly seen in females in the fourth decade. The tumor often presents with overlying skin changes in the form of thickened skin and serous / bloody discharge. Presentation is that of a superficial dermal lesion and hence it is diagnosed early and excised without much investigation.
Malignant transformation has been described but is a very rare case scenario a report of the same has been published wherein a foot lesion was the cause of skeletal metastasis.\(^5\text{–}^7\) The differential diagnoses considered in our case were hydatid cyst, soft tissue sarcoma, or desmoid tumour on the basis of clinical and radiographic examination. The common cytologic differential diagnosis includes clear cell tumors of skin, glomus tumor and sebaceous cyst. Skin tumors like trichilemmoma originating from hair follicle show similar cytology but in addition show nests of basaloïd cells with peripheral palisading and keratinization\(^2,^8\). Glomus tumor show presence of blood vessels, blood elements and absence of mucoid material and foam cells. Sebaceous cyst show predominance of anucleated squames in a dirty background. Neurofibroma can be a clinical mimic which is distinguished by presence of spindle cell component\(^9\).

Hidradenoma seldom undergoes malignant transformation\(^10\). There was no evidence of malignant transformation in this case as per the clinical, radiological and histopathological features, however as the patient was in pain excision in toto was advised and carried out \(\text{Fig 3a, 3b}\). The management of benign, atypical and malignant hidradenomas include wide local excision with adequate margins to reduce the risk of recurrence. Hence all efforts must be made to obtain preoperative histopathological diagnosis. Prognosis of this adnexal tumor is excellent with rare recurrence\(^11\). Malignant form of hidradenocarcinoma is extremely unusual and is seen in very longstanding hidradenomas, featured by cellular atypia, prominent nucleoli and mitosis\(^9\).

**Conclusion**

Diagnosis of this tumor is tricky because of its rarity and variable features. Radiological evaluation facilitates the management of the patient by giving the precise features, extent and involvement of other structures around it. Histopathology is the definitive means of diagnosis and helps in accurate surgical management, thus preventing the chance of recurrence or malignancy.

**Learning Points**

1. Hidradenoma is a benign tumor, but if persists for a long time malignant transformation needs to be ruled out.
2. Hidradenoma should be kept as a differential in mind when dealing with a complex mass/lesion in the subcutaneous plane.
3. Tumor has excellent prognosis and little or no recurrence rate hence early diagnosis and management is of utmost importance.

**References**


