DOI: 10.5958/j.2319-5886.3.2.103

International Journal of Medical Research & Health Sciences

www.ijmrhs.com Volume 3 Issue 2 (April - Jun) Coden: IJMRHS Copyright @2014 ISSN: 2319-5886

Received: 6th Feb 2014 Revised: 4th Mar 2014 Accepted: 7th Mar 2014

Case report

HEPATIC ADENOMA IN AN ELDERLY MALE PATIENT: A RARE CASE REPORT

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ABSTRACT

Hepatocellular adenomas are usually affect females in their 3rd and 4th decades of life. Uses of oral contraceptives use or anabolic steroids have been blamed for this. This is rare in old age and in an elderly male presented with hepatic adenoma. Such cases are difficult to diagnose on fine needle aspiration cytology and can cause under or over diagnosis. Here we present a rare case of hepatic adenoma in an elderly male with both cytological as well as histopathology features of adenoma.

Keywords: Adenoma, Liver

INTRODUCTION

Liver cell adenomas usually affect females in their 3rd and 4th decades of life. [1] However adenomas may be seen in males. Hepatic adenomas are benign tumours of the liver. Estrogeneic hormones may favour their growth. The medical literature documents hepatic adenomas in male who have been taking steroids. They are also documented in caeses of glycogen storage disorders type I and type III, but hepatic adenomas do occur in absence of any of these risk factors. However, it is now clear that hepatic adenomas may also affect men without these risk factors.[2] Here we report a rare case of hepatocellular adenoma in 62 year old male without any history of steroid exposure and with normal AFP levels.

CASE REPORT

A 62 year male initially presented with right inguinal swelling. There was h/o Pain in right scrotum. He was an operated case of gluteal abscess. He was a known chronic alcoholic, tobacco chewer since 16 years of age. The Clinical Impression was right orchitis with bilateral bulbourethrocele with Grade II prostatomegaly. Ultrasond (USG) scrotum showed right acute epididymitis with abscess with mild hydrocele while USG abdomen and pelvis showed prostatomegaly, liver abscess (4 x3.7 cm) with Cholelithiasis (7 cm calculus) and right inguinal hernia. X- Ray chest was normal. Colonoscopy was Normal. X ray abdomen erect posture is normal. Tumour markers showed, Serum PSA – 16.72 (N- less than 4 ng/ml) A.F.P. levels- 0.04 (N-less than 5ng) CA 19.9 – 43.0 (< 37 u/ml). On CT abdomen a well defined solitary mass was seen in VI segment of liver. The central part showed delayed enhancement than surrounding area. Gall bladder showed a calculus of 6 x 4 mm. Provisional diagnosis of hepatoma was made and histopathological correlation was advised.
Fine needle aspiration was done under USG guidance.

Fig1 : Endoscopy of colon

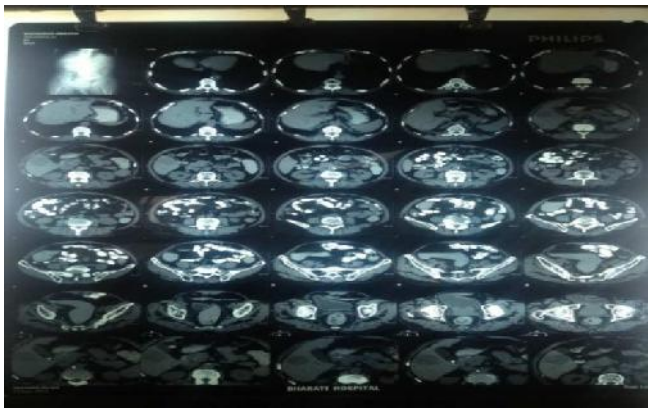

Fig 2: CT abdomen showing a well defined mass in liver.

Fig 3: Gross photographshowing well circumscribed mass M 4.3 X 3.5 X 3 cm . C/s green

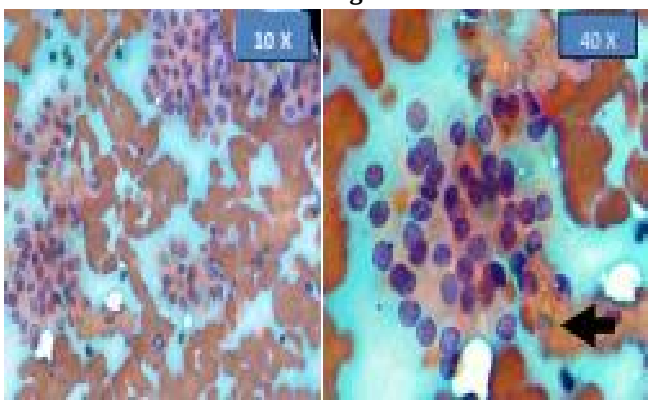

Fig 4: FNAC of liver showing nests and acini of hepatocytes(10X), hepatocytes showing stain cytoplasmic bile pigment (40X)

The cytology showed cellular smears in which cells were arranged in groups, acinar and glandular pattern. The cells were having round monomorphic nuclei with prominent nucleoli. No sinusoidal pattern was seen but cytoplasmic bile pigment was present. Occasional intranuclear inclusions were noted. The cytological diagnosis of hepatocellular carcinoma. Biopsy and clinical correlation was advised in view of normal AFP levels and sos IHC evaluation.

Following this patient underwent partial resection of lobe of liver along with cholecystectomy. The tissue was sent for histopathological evaluation. We received a partially resected lobe of liver totally measuring 10 X 9 X 4 cm, and weighing 180 gm. External surface was smooth while cut surface showed single well circumscribed tumor mass measuring 4.3 X 3.5 X 3 cm. C/s greenish. We also received a gall bladder measuring 10 x 8 cm which showed gall stones.

On histopathological examination of the solid mass, a well circumscribed tumour was seen composed of many hepatocytes arranged in acinar, glandular and cord like pattern. The hepatocytes were separated by fibrous septae. Individual tumour cells were round to polygonal with vesicular nuclei, prominent nucleoli, and moderate amount of eosinophilic cytoplasm. The nuclei showed mild anisonucleosis, minimal periportal and parenchymal chronic inflammation. Many hepatocytes showed presence of cytoplasmic bile pigment. Final diagnosis was hepatocellular adenoma. The gall bladder showed chronic cholecystitis

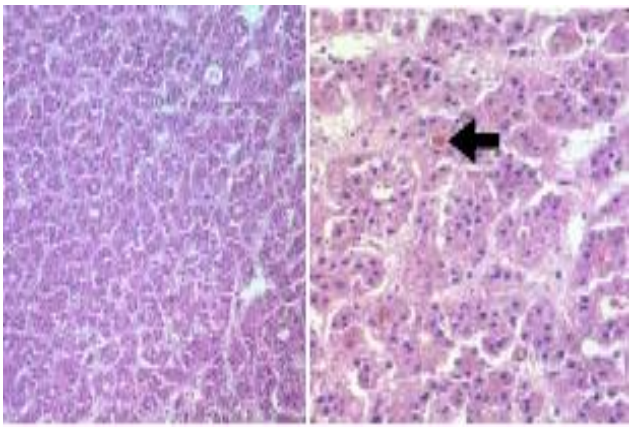

Fig 5: Showing hepatocytes arranged in nests and cords (10X), Glandular, acinar arrangement and bile pigment (arrow, 40x)

DISCUSSION

Hepatic adenomas are thought to be affecting only premenopausal women, but they do occur in men even in the absence of various risk factors that is use of anabolic steroids or presence of a glycogen disorder.16-20% of hepatic adenomas develop in males. Most of these cases single adenomas and the liver are non cirrhotic [2]. Tumour rupture and malignant transformation are the major complications of a hepatic adenomas occurring either in males or females. Intra abdominal hemorrhage is reported in 50 -60% of cases[3]. The risk for males is not exactly known, but Fostar and Burman reported a 20% incidence of malignant transformation [4].

Molecular biological studies disclosed three variants of HCAs, i.e., I) with mutation of HNF 1-alpha gene, II) with mutation of beta-catenin gene, and III) no mutation of the two genes [5].

In our case, the cytohistopathological correlation was not correct because of difficult cytological features of adenoma. In cytology invasion can not be assessed resulting into over or underdiagnosis. The old age of the patient also favored diagnosis of carcinoma over adenoma. In their series of 5 cases studied by Foster and Burman it is of at most importance to diagnose hepatic masses accurately as the treatment may vary from just palliative care to hepatic lobectomy. Radiological imaging and serological markers help in the differential diagnosis.

Although serum AFP level is a marker its sensitivity is less for the diagnosis of hepatocellular carcinoma (HCC). The cytological appearance of HCC varies a lot with the degree of differentiation [6]. A well differentiated hepatocellular carcinoma closely resembles benign adenoma or reactive conditions like a regenerative nodule, a dysplastic nodule, chronic hepatitis or cirrhosis. On the other hand, cytology of benign lesions may show significant reactive atypia or even dysplasia to create a picture like well differentiated hepatocellular carcinoma. The points that favour the diagnosis of highly WD-HCC are hypercellularity of the smears, cohesive broad trabeculae (>2-cell-thick), small monotonous hepatocytes with nuclear crowding, high N: C ratio, cytoplasmic hyaline inclusions (mallory's hyaline), atypical naked nuclei, macronucleoli, tumor giant cells, and a transgressing or peripheral endothelium. Billliary epithelium is not seen in HCC [6,7]. In our case, on FNAC hepatocytes showed mild atypia. The cell cords were >2-cell-thick and subtle increases in the N/C ratio. Reactive atypia or dysplasia in an adenoma is likely to create confusion between an adenoma or hepatocellular carcinoma.

CONCLUSION

Tissue diagnosis is recommended for focal hepatic lesions as the risk of aggressive therapy is greater than the risk of a minimally invasive diagnostic procedure. Ultrasound or CT scan-guided FNAC is a useful diagnostic procedure for evaluating hepatic masses as the procedure is rapid, simple, cost-effective and safe. FNAC is more accurate for diagnosis of malignant than benign lesions.

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