Subcutaneous Myolipoma in the Nape of Neck: A Rare Case Report

ABSTRACT

Introduction Myolipoma of soft tissue is an extremely rare benign lipomatous lesion, which was originally described by Meis et al. (1991). Myolipomas affect adults most frequently in the 5th and 6th decades of life with a female predilection (2:1 ratio). The lesions are most commonly located in the abdominal cavity, retroperitoneum and inguinal areas. Less frequently, myolipomas may be found at sites such as the orbit, eyelid, breast, pericardium, anus, neck and even the extremities. We herewith, report a case of subcutaneous myolipoma presenting at a rare site: nape of neck.

Case History A 26-year-old gentleman presented in surgical OPD complaining of swelling in the nape of the neck since 2 months. His medical history did not reveal any co-morbid conditions, all routine investigations have been done that were within normal limits.

Material and Methods A surgical excision was performed and biopsy demonstrated a myolipoma. Gross examination showed a well-circumscribed mass measuring of 3 × 3 × 2 cm. The outer surface was smooth and the cut surface showed greyish white solid area. On microscopic examination, lobules of mature adipose tissue with intervening fibrous septae containing thin-walled vessels and thick bands of muscle fibres and the final diagnosis of myolipoma was performed.

Conclusion We report a rare case of subcutaneous myolipoma at the rare site in young male patient. Despite the benign nature of these tumors, the correct diagnosis is important, because such masses need to be considered in the differential diagnosis of fat-containing lesions of the soft tissue.

KEYWORDS myolipoma, nape of neck, young male

INTRODUCTION

Myolipoma of soft tissue is an extremely rare benign lipomatous lesion, which was originally described by Meis et al. (1991). Adults in the age group of 5th and 6th decades of life are most frequently affected. Females are affected more commonly than male in the ratio of 2:1. Myolipoma has been described most commonly in the retroperitoneum, orbital region, subcutaneous locations and rectus sheath of anterior abdominal wall1–3. Less frequently, they may be found at sites such as the orbit, eyelid, breast, pericardium, anus and other sites, and are composed of smooth muscle fibres irregularly admixed with mature adipose tissue4–9.

We herewith, report a rare case of subcutaneous myolipoma in a 26-year-old male presenting at a rare site; nape of neck, which evoked interesting differential diagnosis.

CASE HISTORY

A 26-year-old gentleman presented in surgery OPD with chief complaints of palpable mass at the nape of neck for the last 2 months. This mass was slowly increasing in size. Physical examination revealed a non-tender, non-fluctuant and non-pulsatile mass at the nape of neck. His medical history did not reveal any co-morbid condition, all routine investigations including complete blood count, blood chemistry, urine analysis and plain chest radiograph were done, which were within normal limits and his past history was unremarkable.

MATERIAL AND METHODS

A surgical excision was performed and histopathological examination of the specimen was also carried out. Gross examination showed a well-circumscribed...
mass measuring of 3 × 3 × 2 cm. The outer surface was smooth and the cut surface showed yellowish soft tissue areas intermingled with foci of greyish white little firm areas. The microscopic examination of tumor showed lobules of mature adipose tissue admixed with bundles of mature smooth muscles that were spindle-shaped having cigar-shaped nuclei and bright eosinophilic cytoplasm with intervening fibrous septa containing thin-walled dilated blood vessels and thick bands of muscle fibres (Figs. 1, 2). Mitoses, necrosis and cytologic atypia were absent. The final diagnosis of myolipoma was performed.

DISCUSSION

According to 2002 World Health Organization classification of soft tissue tumors, benign lipomatous lesions are classified into nine categories: lipoma, lipomatosis, lipoblastoma or lipoblastomatosis, lipomatosis of nerves, myolipoma, angiomyolipoma, chondroid lipoma, pleomorphic lipoma or spindle lipoma and hibernoma. Myolipoma is an extremely rare benign lipomatous tumor among these lipomatous lesions. Meis et al. (1991) described the first nine cases of soft tissue myolipomas. Myolipomas are composed of variable amounts of benign smooth muscle and mature adipose tissue, and occur frequently in 5th to 6th decades. Females are affected more commonly as compared to males in the ratio of 2:1. They occur in various anatomical sites such as retroperitoneum, rectus sheath of the anterior abdominal wall, inguinal region, subcutaneous adipose tissue, orbit, spinal cord, round ligament and breast. Macroscopically, these lesions are partially or completely encapsulated having yellow to white surface. Microscopically, they reveal admixture of variable amount of smooth muscle and mature adipose tissue usually in a ratio of 2:1 (muscle to fat).

The differential diagnosis of myolipoma comprises of well-differentiated liposarcoma, angiomyolipoma, spindle cell lipoma, omental infarction, hamartoma and leiomyoma with fatty degeneration. Clinically and radiologically, myolipomas are often misdiagnosed as liposarcoma, specifically, if they are deep seated like in retroperitoneum. Myolipoma can be differentiated from liposarcoma, as they are encapsulated (partially or completely), lack of lipoblasts, atypia, mitoses, grossly and microscopically respectively. Myolipoma can be distinguished from angiomyolipoma as latter shares the large size and are located in the retroperitoneum. In this case, histologically due to abundance of blood vessels, they show very close resemblance to angiomyolipoma. However, in this case, the points against angiomyolipoma were lack of infiltrating borders, abundant thick-walled blood vessels and lack of immunoreactivity of smooth muscle component for HMB45 (Fig. 3).

Although the majority of angiomyolipoma follow a benign course, the potential for malignant transformation have also been reported. The previous data suggest that they neither metastasize nor recur post-operatively and clinicohistologically they are benign in nature. Spindle cell lipoma was also considered in the differential diagnosis, but the presence of smooth muscle, anatomical site and the deep location rule out the diagnosis. The surgical excision is the modality of treatment for myolipomas.
CONCLUSION

A rare case of subcutaneous myolipoma at the rare site in a young male patient is reported. Although they are benign in nature, the correct diagnosis is important, because such lesions need to be considered in the differential diagnosis of fat-containing lesions of the soft tissue.

REFERENCES