Giant fibro epithelial polyp in a young girl: A rare case report

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ARTICLE INFO

Article history:
Received 3 April 2017
Received in revised form 16 June 2017
Accepted 17 June 2017
Available online 15 July 2017

Keywords:
Fibro epithelial polyp
Groin
Young girl
Giant
Case report

ABSTRACT

INTRODUCTION: Fibro epithelial Polyp (FEP) is a polypoid outgrowth of epidermis and dermal fibro vascular tissue. This polyp is most commonly found in oral cavity, neck and axilla, though any skin fold may be affected like groin area. These polyps are usually less than 5 cm in size and rarely occur before 4th decade of life. Excision is the treatment of choice for such lesion.

PRESENTATION OF CASE: A 20 year old female patient presented with a large pedunculated mass originating from the left groin area extending up to the left knee joint. It measured 42 cm in diameter. Surgical excision with primary closure was performed. We present this case because of its size and its occurrence at early age.

DISCUSSION: In this case, a mass of 42 × 22 × 10 cm in a 20 years female has been described. This mass was diagnosed as a giant FEP, which is the largest size FEP reported, to the best of our knowledge. FEP usually occurs in females of reproductive age group but in the present case it occurred in a 20 years old female. Various other lesions like leiomyomas, superficial angiomyoma and neurofibroma mimic FEP. Complete excision with long term follow-up is the best option in such patient.

CONCLUSION: Giant FEP is a benign lesion, sometimes it may be misdiagnosed as malignant lesion because of its large size and occurrence in early age. Hence excisional biopsy is important to confirm the diagnosis.

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1. Introduction

Fibro epithelial Polyp (FEP) is a polypoid outgrowth of epidermis and dermal fibro vascular tissue. This polyp is most commonly found in oral cavity, neck and axilla, though any skin fold may be affected like groin area. These polyps are usually less than 5 cm in size and rarely occur before 4th decade of life [2,3]. Excision is the treatment of choice for such lesion. Our case report is in accordance with SCARE criteria [15].

2. Case report

A 20 year young female was referred to our hospital from state medical college & Hospital for the evaluation of giant mass in the left groin area. This mass was present for last 10 years and was gradually increasing in size. Apart from the cosmetic problem, main concerns of the patient were inability to walk, inability to sit on toilet seat, spillage of urine over the mass, as it was overlying her genitalia & this forced her to keep both lower limbs apart. Examination revealed that swelling was 42 cm long, 22 cm wide & 10 cm thick (Fig. 1) originating from groin area just below the left inguinal ligament and extending to the left knee joint. When palpated, the mass was firm, non-tender, non-fluctuating and passive or active reduction into abdominal cavity was not possible. The trans-illumination test as well as impulse on coughing were also absent. FNAC (Fine Needle Aspiration Cytology) was non-conclusive and Ultrasound revealed well circumscribed soft tissue echogenic homogenous mass with no cystic/necrotic or calcification. Computed Tomography (CT) revealed non-enhancing soft tissue density mass with no cystic/necrotic or calcification. Surgical excision was done for the lesion. Intra-operatively, large number of lymphatic channels were found, all the lymphatics & blood vessels were secured and an umbrella shaped mass was excised (Fig. 2) and primary closure of the wound was done. Histo-pathologically this mass was diagnosed as fibro-epithelial polyp. She has now been on our follow-up for the last 8 months and is doing well. Informed consent was taken from patient for the publication of this case report and accompanying images.

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http://dx.doi.org/10.1016/j.ijscr.2017.06.059
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3. Discussion

Initially FEP was described by Norris and Taylor in 1966 [1]. Giant fibro epithelial polyps are benign tumor rarely exceeding 5 cm size [2]. Usually its incidence increase with age and quite rarely occur before 4th decade of life. [2,3]. Only three cases in respect of size and weight were reported, one was 35 × 23 × 11 cm large, weighing 10 kg [4] and second case was 18 × 9 × 3 cm in size reported by Elf Colak [5,6]. There are many theories regarding its etiology. One of these theories claimed that FEP develops secondary to a focal loss of elastic tissue [7]. Another theory suggests that these polyps are a collection of several tissues that represents a hamar-toma with a slow rate of growth or fibroma that exhibit the feature of a benign lesion [8].

Although, the risk of malignancy and recurrence are very low, [9,10] malignancy must be excluded by tissue biopsy. Various other lesions like leiomyomas, superficial angiomyxoma, perineuroma and neurofibromas mimic fibro epithelial polyp [11]. In the present case, definitive diagnosis was confirmed on the basis of histopatho-logical examination. Histologically, the most characteristic feature of this polyp is the presence of stellate and multinucleate stromal cells at the epithelial-stromal interface [12]. In this case, the microscopic evaluation of the lesion revealed the presence of fibro-collagenous and fibro fatty tissue as well as the presence of blood vessels, lymphatics and chronic inflammatory cells in the stromal part. Immunohistochemically, fibro epithelial polyps are usually positive for Desmin, Vimentin, estrogen and progesterone receptors and less frequently for Actin [13]. Ideal treatment for this lesion is complete excision and long term follow up to detect recurrence at the earliest. [14].

4. Conclusion

Fibro epithelial polyps are benign, mesenchymal lesions which usually occur after fourth decade of life. These polyps are commonly found in oral cavity, genitourinary area and are usually less than 5 cm in diameter. Rarely they may grow up to 42 cm in size, weigh 15 kg, occur anywhere in the body and before 20 years of age. In such a case, they can mimic a malignant growth. Excisional Biopsy with primary closure is the diagnostic as well therapeutic approach in such case.

Conflict of interests

The authors have no conflicts of interests to disclose.

Sources of funding for your research

No source to be stated.

Ethical approval

Not Applicable.

Consent

Informed consent for the publication of this work has been taken by the patient.

Author contribution

Anil Kumar: wrote the Manuscript; Operated the patient; Surgeon responsible for the in-patient optimization.
Nadia Hasin: Follow –up & review the manuscript.
Amit Kumar Sinha: Responsible for Anaesthesia and post-operative pain management.

Punam Bhadani: Pathologist performed the histological examination.

Subhash Kumar: Radiologist performed the evaluation of Ultrasound and CT Scan.

Registration of research studies

Not Applicable.

Guarantor

Dr Anil Kumar.

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