

Case study

A rare case of acquired axillary cystic hygroma in an adult patient.

ABSTRACT:

A case of cystic hygroma was found in an adult male patient of 43 -year- age in the left axilla, which was non tender cystic mass (57 x 40 x 49 mm) filled with haemorrhagic blood. It was successfully removed surgically without any complications. Being very rare presentation in axilla of an adult, this case is reported.

Keywords: Cystic hygroma, Adult, Axilla, Haemorrhage.

1. INTRODUCTION

Cystic hygroma, a benign and congenital malformation of lymphatic system, also known as lymphangioma, usually occurs in children especially in neck. [1-3]. Cystic hygroma in adult is very rare and less than 150 cases of cervicofacial cystic hygroma are reported in English literature up to 2011 [2]. Hygroma means a water containing tumour. This lesion does not have connection with the lymphatic or venous system. It may have unilocular or multilocular cystic lesions and may be of variable size. Macrocystic lymphangioma is known as cystic hygroma and is more common [4]. In microcystic varieties the cyst may be less than 2 cm diameter but in macrocystic size is more than 2 cm and in mixed variety the size of cysts is variable [5]. Most often it is found in cervical region of children and less frequently found in axilla or other site. Other uncommon sites are soft tissue, orbital cavity, mediastinum, pancreas, liver, ovary, and fallopian tubes [6]. There are only four cases of cystic hygroma in axilla of adult patient [7-10].

Literature search (PUBMED, google and science direct) did not show any published report from Malaysia. In view of rare occurrence in adult especially in axilla, this case is reported. To the best of our knowledge this is the first reported case of cystic hygroma in axillary region in an adult patient from Malaysia.

2. CASE HISTORY

A 43 -year- old man, was referred to surgical clinic of this hospital on 7th July 2015 with complaint of a mass in left axilla since 10 years which was very small, but recently in last few months, it was increasing in size and patient had problem in moving the left upper arm. The surgeon examined the case and found a cystic mass in left axilla about 60 mm x 50 mm in size. It was cystic and non-mobile. There was no history of trauma, and there was no loss of weight or appetite by the patient. Patient gave history of chronic use of deodorant spray.

Patient was referred to radiology department for MRI of left axillary mass which revealed a well-defined oval cystic mass in left axilla measuring 57 x 40 x 49 mm. it was not attached to surrounding structure like blood vessels and muscles etc. The mass was cystic and no solid component was found in it [Figure 1]. The wall was smooth and thin and there was a fluid level

37 seen in the cyst. Axillary lymph nodes were not enlarged. The MRI diagnosis was a cystic hygroma
38 with hemorrhagic blood within it.

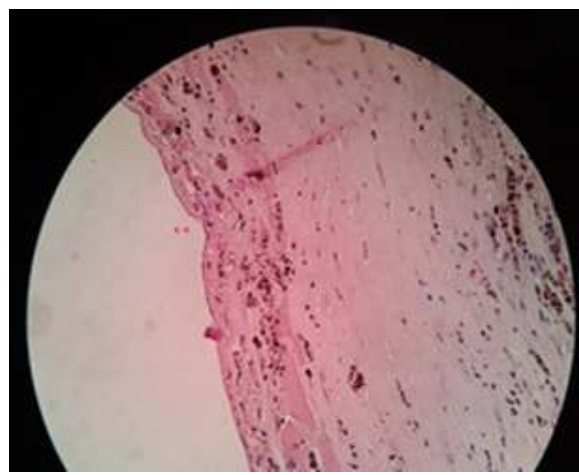
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41 **Fig 1.** MRI of left axilla showing wall of cyst (large black arrow). The cyst is filled with haemorrhagic blood
42 (white multiple two locules), large arrow marks.

43 **Fig 2 :** Gross appearance of the inner surface of the wall showing some blood clots (dark brown).



44 **Fig3:** Microscopic appearance of the cyst wall (H&E stain, X 100). The thin and smooth cyst wall composed
45 fibrous connective tissue lined by flattened epithelium.

46 **Fig 4:** High power microscopic (H&E stain, X 400) shows flattened epithelium and scattered hemosiderin
47 laden macrophage in the wall.

48 The patient was operated under general anaesthesia on 8th July 2015 and the cystic lesion was
49 separated intact and the removed specimen was sent in formalin for histopathology.

50 The pathologist noted that the outer wall was intact, smooth, and brownish black in colour and size
51 of cut opened specimen was 93x83x10 mm as seen in picture. The lumen of cyst was unilocular and
52 bit irregular without any papillary structures. The wall was thin and smooth. There were some
53 blood clots within the cyst [Figure 2].

54 Few random areas were selected from the gross specimen and processed for microscopic
55 examination. Microscopic features were characterised by a thin and smooth wall, which was
56 composed of fibrous connective tissue lined by very thin and flatten epithelium. Few hemosiderin
57 laden macrophages were seen in the wall. There were no any papillary structures or any malignant
58 changes in cyst wall [figure 3]. Histopathological diagnosis was cystic hygroma with some
59 haemorrhage in the cyst.

60 Post-operative stay in the hospital was uneventful. The patient was discharged from hospital on 10th
61 July 2015 and was followed up twice on 20-8-15 and 10-12-15. There was no problem found
62 during follow up visit and the operated site showed healed scar without any recurrence in the left
63 axilla.

64 **3. DISCUSSION**

65 Cystic hygroma (also known as cystic lymphangioma) is a congenital lesion usually seen in
66 children under the age of 2 years. It is a malformation of lymphatics. It may occur at various places
67 in the body but usually in the neck and uncommonly in other part of body of children. Cystic
68 hygroma is an uncommon lesion in adult and very few cases are reported in literature. [2,4]. The
69 cystic hygroma are benign and painless proliferation of lymphatics and occurs with no connection
70 between lymphatics and venous system.

71 The predisposing factors that are responsible for the development of cystic hygroma in adult are
72 infection, trauma, being as a growth or iatrogenic stimuli etc. [1]. Surgical excision is the main
73 treatment and other treatment includes injection of bleomycin, a sclerosing agent and laser
74 surgery.[1,3,5]

75 A case of large, fluctuant and non-tender cystic hygroma (10x12x17 cm) was reported by Gelal et
76 al in a 24 year old, seven months pregnant woman in left axilla, situated between anterior and
77 posterior axillary line [7].

78 Güner et al reported a case of axillary cystic hygroma in 83 -year- old male with history of
79 discomfort during inspiration phase of breathing for the past four months. It was a painless and
80 mobile right axillary mass. They did not find any recurrence during five months follow up period
81 [8].

82 Michail et al reported a cystic hygroma in a female patient which developed rapidly in the axillary
83 region in the absence of any predisposing factor [9].

84 McCaffreya et al reported an another case of cystic hygroma in a 58 year old male in right upper
85 flank extending up to axilla which was non tender and large (20x12x7 cm). It was multi septate
86 lesion and there was no any recurrence found on follow up after one year of surgery [10].

In our case there was no history of any predisposing factors. Presence of blood in the removed cyst suggests the possibility of minor trauma before coming to the hospital for check-up. The size of cystic hygroma of this case was medium size when compared to other two cases.

Detailed imaging procedures like ultrasound, MRI and CT scan will help the diagnosis preoperatively and histopathological examination of surgically removed specimen will confirm the diagnosis of cystic hygroma.

4. CONCLUSION

Cases of cystic hygroma in adult male especially in the axillary region is a rare occurrence.

ETHICAL APPROVAL:

It is not applicable.

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