

## Primary Hydatid Cyst in Axillary Region: A Rare Presentation

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**Abstract:** A 20 years old female presented to our hospital with complaints of painless swelling in left axilla of 2 months duration. Ultrasound of the axilla showed a unilocular cyst, patient underwent total cystectomy and diagnosis of primary axillary hydatid cyst was confirmed on histopathological examination. Primary axillary hydatid disease is rare even in endemic regions, only eighteen cases have been reported. This case report serves to demonstrate that hydatid disease should be borne in mind as the possible cause of a palpable lesion in the axillary region especially in endemic locations.

**Keywords:** Primary hydatid cyst; axilla; rare presentation

### INTRODUCTION

Human hydatid disease is a parasitic infection caused by the larval form of *Echinococcus granulosus*, where humans are occasional intermediate hosts. The hydatid cysts tend to form in the liver (50-70% of patients) or lung (20-30%) but may through the capillary systems reach the general circulation and pass to all viscera and soft tissues. Hydatid cyst may arise in atypical sites such as brain, heart, orbit, urinary bladder, chest wall, subcutaneous tissue, tibia, parotid gland, breast, cervicofacial region, thyroid and in any organ of the body. Primary axillary hydatid disease is rare even in endemic regions, only eighteen cases have been reported [1, 2].

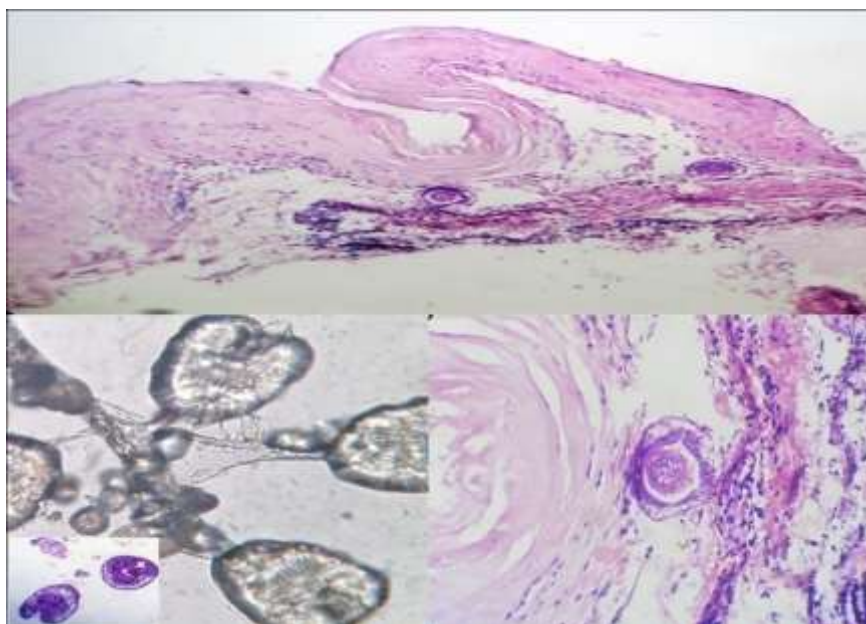
### CASE REPORT

A 20 years old female presented to our hospital with complaints of swelling in left axilla of 2 months

duration (Fig. 1). She had no history of breast mass, fever, swelling elsewhere in body or previous history of hydatid cyst. A non tender, mobile, cystic swelling measuring 6x6cms was present in left axilla. Skin over the swelling was normal and pinchable. Fluctuation and transillumination were positive. Breast examination was normal. All laboratory investigations were normal. USG of the swelling showed unilocular cyst in subcutaneous plane. FNAC of the swelling was inconclusive. Chest X-ray and USG abdomen were normal. Patient underwent total cystectomy and entire cyst was sent for histopathological examination. Gross examination showed a pearly white cyst measuring 5cms in diameter. Microscopy showed multiple daughter cysts. Sediments showed scolices and hooklets of *Echinococcus granulosus* (Fig. 2). Post operative period was uneventful. Patient received 400mg albendazole twice daily for four weeks.



Fig. 1: Image showing pre-operative image and excised pericyst



**Fig. 2:** Image showing ectocyst with scolices and wet mount of scolices

## DISCUSSION

Hydatid cyst is a zoonotic disease that occurs throughout the world particularly those areas where the people are involved in cattle rearing profession [3]. The life cycle of *E. granulosus* alternates between carnivores and herbivores, whereas man is an accidental host with end point in parasite's life cycle [4]. Hydatid cyst grow 5-10 cms in size within the first year and can survive for years or even decades [5, 6]. If symptomatic, symptoms depend on the organ involved, location, its effect on adjacent structures, complications due to rupture, secondary infections and immunological reactions caused by the cyst [7].

The diagnosis of hydatid cyst is based on patient's history, clinical findings, haematological and serum biochemical profiles and serological testing [8]. The differential diagnosis of axillary tissue masses includes hematoma, abscess, sarcoma, lymphadenopathy, breast cancer, soft tissue tumor.

When hydatid infection is suspected on sonography or CT, it may be confirmed by a ELISA or western-blot [1].

Treatment options for cystic echinococcosis include surgery, PAIR (puncture, aspiration, injection and reaspiration) and drug therapy [9]. Surgical resection is the optimal treatment to prevent complications.

Total cystectomy with fibrous adventitia allows removal of all parasitic elements without spillage of the contents is curative treatment for soft

tissue hydatidosis [1]. All patients are treated with albendazole 10mg/kg/day for atleast two weeks preoperatively and this is continued postoperatively for four weeks.

## CONCLUSION

Hydatid disease is a widespread public health problem in developing countries especially in endemic regions, therefore it should be considered in the differential diagnosis of a palpable mass in the axillary region.

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