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## HYDATID CYST OF THE PAROTID GLAND

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Echinococcosis of the parotid glands is a very rare condition. It is seldom seen even in endemic areas. To our knowledge, only 29 cases have thus far been reported in the world literature. Present communication deals with a case of Echinococcosis of the right parotid gland, manifesting itself as a solitary mass.

#### CASE REPORT:

B.G., a 30 year old female farmer from the southern part of Iran, (Kerman) was admitted to our surgical service because of a swelling of the right parotid region. The onset of her disease dated back to four months prior to admission, during which time the tumor had increased rapidly in size.

On examination, the patient was well nourished and had no particular complaint except discomfort of her right parotid region. On palpation, there was a large mass in the region of the right parotid gland measuring about  $3x3^{cm}$ , with irregular borders. There was no evidence of facial nerve paralysis.

### LABORTAORY DATA:

W.B.C. was 8000 with 5% eosinophilia. Chest roentgenogram and radionuclide scan of the liver were normal. All other tests were within normal limits.

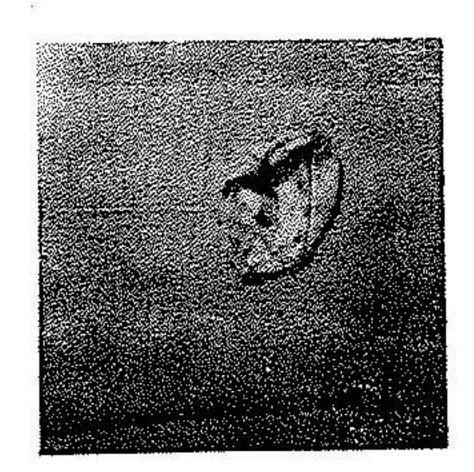
### OPERATION:

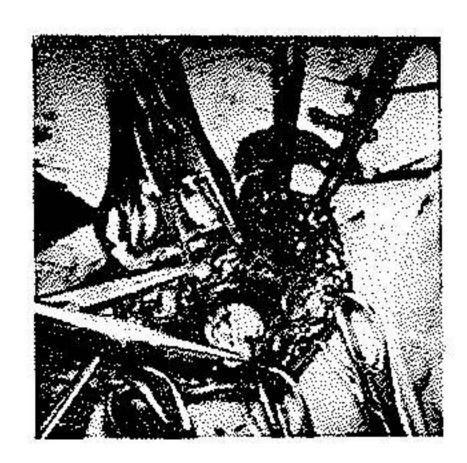
The preoperative diagnosis was a mixed tumor or benign cyst of the parotid gland.

At operation, after dissecting the superficial part of the parotid gland some clear fluid suddenly escaped into the operative field and the tumor mass collapsed. Assuming the fluid to be of hydatid cyst origin, an incision was made directly into the mass. A collapsed hydatid laminated membrane was observed.

The whole cyst was removed and the incision repaired without further dissecting of any part of the parotid gland or damage to the facial nerve.

Pathological examination confirmed the clinical diagnosis.





### DISCUSSION:

Echinococcosis is caused by the tape worm, Echinococcus granulosus, which can form larval cysts in human tissues.

The dog, wolf, and fox are the definitive hosts which harbour adult worms in their intestine. Ova which are passed in the faeces, are ingested by intermediate hosts such as cattle, sheep, and incidentally man. Dogs become infected by eating affected raw organs of sheep containing viable hydatid cyst scolices.(2-3)

Hydatidosis is a relatively common disease in the Middle-East, comprising a significant percentage of total admission to general surgical wards in Iran. A report from Ferdowsi Medical School in Khorassan, north east of Iran, shows that 6.5% of sheep, 16% of cows and camels harbour hydatid cyst and 19% of dogs in this province are infested by Echinococcus granulosus. The liver and lungs involvements account for 90% of cases, but hydatid cysts can also occur in many other organs of the intermediate host. The parotid gland is one of the rarest organs to harbour hydatid cyst.(1.4.5)

No observation on the hydatid cyst of the parotid

gland has so far been recorded from any part of Iran.

In reviewing the literature, Martini (1935) gathered 23 cases of hydatid cyst in the parotid glands. Later, Toul (1937) reported 3 additional cases and Yannulis (1957) and Nassuphish (1972) have each published one case of parotid gland hydatid cyst. The latest report on this condition is from Italy by Paxeddo (6.7)(1979).

Our review of the available literature covers up to June, 1984.

### REFERENCES:

- Riquet, M., Cohen-Solal G., Soulier, A. (1982).
   Kyste Hydatic du cou. Ann. oto-larngo.
   99,269.
- Azizi, A. (1964).
   Statistiques des Kystes hydatiques Operes a Tehran Endemiologie du hydatique en Iran.
   Lyon chir., 60, 379.
- 3. Saidi, F. (1970). Surgery of hydatid Disease . WB. Saunders Company Ltd., London.
- 4. Skandalkis, J., Godwin, J.T. (1970). The differential diagnosis of tumor of the neck.

  Prog. Clin. Cancer 4, 141.
- 5- Charbi, H.A., Ben Cheikh, R., et al. (1977).

  Rare sites of hydatid disease in Children.

  Annales de Radiologie, 20, 1, 151.
- 6. Nassuphis, P. (1957). Hydatid cyst of Parotid (case report). H., N., O., 20, 6, 179.
- 7. Puxeddo P., et al. (1979). Hydatid cyst of parotid Gland. Ann. Laringl Faringol., 77, p-2, 99.

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