



EXTRA HEPATIC HYDATID CYST

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ABSTRACT

INTRODUCTION: Echinococcosis or hydatosis is a common condition in many parts of the world, is due to cestodes parasites commonly known as tapeworm of carnivorous animals. Parasite exists into two species in human population *E. granulosus* and *E. multicularis* causing cystic hydatosis and alveolar hydatosis respectively, hydatosis has been reported in virtually all organ of the body, the most affected organs being liver and lungs. This zoonotic disease continues to be the main cause of economic losses and socioeconomic problem in most parts of the world.

MATERIAL and METHODS: A clinical study on patients with extrahepatic hydatosis was conducted in TMMC \$ RC, MORADABAD. Eight cases of extrahepatic hydatid cyst reported from July 13 to June 17. All these patients were subjected to routine investigations like CECT USG. Surgical interventions done were, splenomegaly, adrenalectomy and according to organ involved. Albendazole was given to all patients in post operative period. Post operative period was uneventful in all these patients and were regularly followed in OPD.

DISCUSSION:- There is no definitive figure about the prevalence of this zoonotic disease in our society. Many a times this is found accidentally. Extrahepatic hydatid cyst is extremely rare.

KEYWORDS : Hydatosis, zoonosis**INTRODUCTION**

Echinococcosis or hydatosis is a common condition in many parts of the world, is due to cestodes parasites commonly known as tapeworm of carnivorous animals. Parasite exists into two species in human population *E. granulosus* and *E. multicularis* causing cystic hydatosis and alveolar hydatosis respectively. Because of immigration, the prevalence Wani¹ has increased in Europe and North America as well in recent years^{10,11}. In Our country most affected areas are Andhra Pradesh, Tamil Nadu and J and K, but is prevalent all over country. Hydatosis has been reported in virtually all organ of the body, the most common affected organ are liver and lungs. This zoonotic disease continues to be the main cause of economic losses and socioeconomic problem in most parts of the world BB Singh². Even though it has been eradicated in most parts of the world but still it is a serious endemic problem in developing countries.

Hydatosis manifests by slow growing cystic mass affecting liver 75% and lung 15%, but it can effect anywhere in the body P POLAT⁴, the extra hepatic incidence is 10%. The objective of the study being to present our observation and experience of some rare locations and management of extra hepatic organelle.

DISCUSSION

There is still no definite figure regarding the prevalence of hydatosis in society as the majority of cases are asymptomatic and diagnosis is made accidentally or incidentally but as such hydatosis is endemic in India and animal incidence varies for 200 per 100000 persons khadeer faheem³.

Hydatosis is a zoonotic infection caused by *Echinococcosis granulosus* and rarely *E. multicularis*. However diagnosis of hydatosis at unusual locations remains challenging because of variable clinical presentation and imaging appearances depending on host reaction jaheed amir¹. Imaging findings range from purely cystic to solid appearing masses. They may present as ring like or totally calcified lesions, during natural evolution which is more common in liver, spleen and kidney P. polat⁴. Endocystic detachment from pericyst present itself as "floating membranes" inside the cavity, is Specific feature of the disease, but complete detachment of endocyst has been referred to as "water lily sign."^{21,22}

Multivesicular cysts presents as well defined collections in honeycomb pattern, with multiple septa representing the walls of daughter cysts and when daughter cysts separates they show "wheel spoke" pattern⁵

After ingestion of contaminated food majority of embryos colonise to liver by way of portal system but those crossing this barrier of filtration device of body get into systemic circulation, circulate throughout the body and again get stationed in lungs. Thus liver and lung becoming the most common sites, while in other organs parasite can settle through circulation. There is some evidence that lymphatic system may be implicated in the transport of oncosphere from the gut to the site of cystic development. Extra hepatic abdominal hydatosis can be primary or secondary and by far splenic involvement is the third common site [wani¹⁵]. There are few case reported of hydatid cyst of pancreas [wani¹⁵] and only one case of gallbladder involvement so far [rigas AM¹⁶]. Peritoneal hydatosis usually secondary to liver hydatosis [karavias DD¹⁷]. Hydatid cysts of colon is rare while adrenal being very rare. Majority of studies M:F ratio has been 2.5:1 but still same studies showed female preponderance [4,12,14]. The difference in the reports and studies was due to difference in socio-economic, traditional, cultural variations specially in India as well as in the other parts of the world.

In Experimental studies in mice, an interesting finding was that male mice was more susceptible than female, basis pronounced being that estrogen has an inhibitory action on the level of parasitization while testosterone had little or slight increased the susceptibility to host infection 4-andhra. Many studies have reported the involvement of various organ other than liver. The cysts have been reported in india in retroperitoneal area, pancreas, genitourinary tract, diaphragm, bones and soft tissue, gallbladder, retrovesical pouch, pelvis, uterus, ovary, and abdominal wall⁶.

MATERIAL AND METHODS

A Clinical study on patients with hydatosis was conducted in teerthanker mahaveer medical college, Moradabad a 1000 bedded tertiary care hospital situated in western part of uttar Pradesh. Patients with this zoonotic disease are very often diagnosed in our institute, majority of cases being suffering from liver hydatosis. but in last 2 years from July 15 to June 17, 8 cases of extrahepatic hydatosis were diagnosed on rare sites. they were treated medically as well as surgically.

All the patients reporting in our institute and were subjected under routine investigations, including usg and CT scanning. we recorded 1. demographic data [age, gender, address, occupation], 2. clinical features [lump, site of lump, pain and its duration, jaundice, fever]. 3. clinical examinations [pallor, lymphadenopathy, skin changes]. 4. investigations complete haemogram 5. USG [size and site of cyst, presence of daughter cyst] 6. CT examinations to confirm usg

findings 7. type of treatment .however diagnosis was be made only on exploration and histopathology particularly when it was located at rare site.

RESULTS:

Eight patients were found to be suffering from extra hepatic hydatid cyst in the period from july 2015 to june 2017.Age ranged from 17 to 68 yrs , patient aged 17 yrs was only female who had cyst in thigh .Three patients had cysts of variable sizes in spleen and one cyst each kidney in three patients in kidney,adrenal gland ,head of pancreas,and in muscle planes of left forerarm.

Study included various socioeconomic status of society.50% had positive history of association with dogs and sheeps in life for variable period and others were from rural background .In our study three patients had discomfort in left upper abdomen with palpable spleen ,one patient with abdominal pain and dyspepsia, was found to have cyst in head of pancreas which later histologically, proved to be hydatid cyst ,one female had small lump in left thigh. Exicision followed histology confirmed hydatid cyst in intermuscular plane .A young male had cystic swelling in left forarm on flexor aspect on excisional biopsy it was hydatid cyst, all patients was diagnosed as having adrenal hydatid cyst as histology „all type he had only mild discomfort in back.

S.NO	AGE	SEX	ORGAN INVOLVED
1	17	F	Thigh left
2	46	M	Spleen
3	36	M	spleen
4	41	M	spleen
5	51	M	Adrenal gland LT
6	39	M	Head of pancreas
7	19	M	Flexor surface of RT forarm
8	37	M	kidneyLT

We treated these patients surgically like splenomegaly, adrenalectomy and excision of cyst in toto and according to be organ involved but there are other modalities also of the treatment like PAIR 17,18 Percutaneous evacuation[PEVAC]19,video assisted surgery [VAT]20.Laparoscopy.Albendazole was given to all patients because of its proven effect on the parasite post operatively.Pre-operatively because diagnosis was not confirmed in majority,thus no need was thought of starting the drugs .

Post operatively period was uneventful in all these patients and were regularly followed in OPD.This zoonotic disease remains a neglected disease.despite it is directly concerned with human being and animal.Singh² due to EC. Out of total human population of india .564 and 17075 cases per year were extrapolated each year .

The analysis by singh reveals total annual median Rs 427.2 million in our country.



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