Hydatid Cyst of the Psoas Five Cases Report

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Citation

Abstract
Introduction: The hydatid cyst is a cosmopolitan parasitic infection that constitutes a problem of the public health in the zones of rising of the developing countries. Material and methods: We report five cases of hydatid cyst of the Psoas collected in the general surgery service of the Avicenne military hospital in Marrakech since 20 years. The interest of this work is to return that it is a rare affection and that can don a misleading shape capable to wander the diagnosis. Result: All patients were of masculine sex. The clinical diagnosis has been put in four cases and the hydatid cyst of the psoas donned a misleading shape in one case. The medical imagery confirmed the diagnosis. The treatment was essentially surgical and that consisted in any case in a pericystectomy. The follow up didn't show any sign of recidivism. Discussion: The muscular hydatid is a rare affection and the attack of the psoas is exceptional; it is always necessary to think of it among a country to high endemic. The eradication of this affection rests on the prophylaxis. Conclusion: The hydatid cyst of the psoas is a rare affection to slow development, the authors insist on the importance of the diagnosis operative meadow, on the diagnostic difficulty and the therapeutic modes.

1. Introduction
The hydatid cyst is a parasitosis due to the development of the embryonic shape of echinococcus granulosis. The usual host is the dog, the man being the intermediate host. The localizations at the man are varied, only or multiple, isolated or associated. The liver and the lung are organs most frequently affected. The muscular hydatidosis is a rare affection and the infringement of the psoas countered exceptional; even in country of endemic disease. The rarity of this localization and its clinical polymorphism make the interest of this study.

We report five cases of hydatid cyst of psoas.

2. Materiel and Methods
2.1. Observation 1
41 years old, operated twice in 1985 and 1986 for a hepatic hydatidosis in the service.
Admitted in 1990 for a pain of the right hypochondria. The clinical exam was normal. The echograph show a transsonore of retro peritoneal mass seat which can correspond to a hydatid cyst type I. The intervention practiced was led by iterative right under costal way. The cyst was evacuated after then sterilized by the hydrogen peroxide, the extraction of proligeres membranes and a total pericystectomy. The follow up were simple and he left the service after ten day.

2.2. Observation 2

43 old years’s admitted for pains of the left side. The clinical examination showed the existence of a mass independent from the spleen. The radiography of the belly without preparation showed the disappearance of the external edge of the left muscle psoas. The echograph show a liquid mass of 13cm of main line with aspect in nest of bee corresponding to the hydatid cyst of type III. The scanner specified the retro peritoneal seat at the level of the psoas.

Operated by a median under umbilical way, unsticking summer camp left parietal bone and exhibition of the cyst. The parasite was treated according to the usual protocol and we realized a partial pericystectomy leaving of the perikyste profoundly set in the psoas. The consequences were marked by a crural paralysis which declined in a spontaneous way in six months.

2.3. Observation 3

21 years old admitted in emergencies for pains of the left hypochondria evolving in a feverish context in 39 °C. The abdominal palpation ached as well as the percussion of the left thoracic basis. A hyper leukocytosis in 20 000 elements / mm3 and a sedimentation speed in 60 in the first hour. The radiography of the belly without preparation showed a disappearance of the external edge of the right psoas. The echograph showed a heterogeneous spleen with multiples formations and a hydatid cyst of type III in the contact of the right psoas. The scanner confirmed the data. A triple antibiotic treatment was established with Penicillin, Gentamycin and Metronidazole during 15 days. A clear improvement was noticed but in the echograph we noted an increase of the volume of the spleen.

Operated by a median way. The spleen was very reshaped with epiploon and peritoneal adhesions, we realized a total splenectomy, then we handled the hydatid cyst which was in expenses of the muscle psoas . It was treated in a usual way with total pericystectomy. The follow up were simple and he left the service after eighth day. The anatomopathologic of the spleen concluded in an ischemic necrosis.

2.4. Observation 4

34-year-old admitted in the service of neurosurgery for coverage of a right para vertebral collection in a feverish context with lumbago and a loss of weight calculated to 6 KG in two months associated with a tumefaction of the iliac pit. The probably tubercular diagnosis of spondylitis of origin is evoked. The abdominal echograph showed a collection adorned vertebral right spread to the iliac crest. The pelvic abdominal scanner showed the presence of a collection divided up in touch with the muscle psoas and right psoas iliac (figure 1). The biological balance showed a hyperleukocytosis in 12000elements / mm 3. The research for Koh Bacilli in spits and in urines was negative as well as the intra dermic reaction (IDR) of tuberculin. The chest radiography was normal. The diagnosis of an abscess of psoas was retained and the patient was sent in our service for a surgical care. The hydatid cyst of the psoas was operated, the per operating exploration showed a cyst coming from all sides at the level of the iliac psoas and at the level of the fold of the groin. After protection by fields soaked in the hydrogen peroxide and the aspiration of the contents of the cyst and cleaning abounding by the serum and the hydrogen peroxide, a pericystectomy was realized with a good clinical and radiological evolution.

2.5. Observation 5

30-year-old without medical and surgical histories, admitted in the service for a care of a mass of the right abdominal side.

The follow up are simple with a backward movement of five years without any sign of second recurrence.
The clinical examination concluded in a pain with palpation of a mass of the right iliac pit evolving in a feverish context (figure 2).

The abdominal pelvic scan showed a heterogeneous process in expenses of the right iliac psoas (figure 3).

Operated by a right lombotomy with a retroperitoneal approach, the hydatid cyst was handled in a usual way as well as an almost total pericystectomy.

The follow up were simple, the patient left the service in the third day with a good clinical and radiological evolution.

3. Discussion

The human hydatidosis is a cosmopolitan parasitic infection due to the development of the embryonic shape of echinococcus granulosis. The usual host is the dog, the man being the intermediate host. Embryonic eggs, eliminated in the outside environment with the saddles of the dog, are ingested, penetrate into the digestive wall, win by the system carry the liver, sometimes exceed the liver by sus hepatic veins and reach lungs. More rarely, the localization can be made in any point of the body. Of other one unusual localizations were reported in particular the bone 1 at 3%, pleura or peritonea 4 at 7%, spleen and kidney 2 at 5%, heart 0,5 at 2% of the hydatid localizations (1). More exceptionally the thyroid, the pancreas, the ovaries, the articulations, the under cutaneous and muscular parts Soft.

The muscular hydatidosis is an interstitial parasitosis or the embryo is transplanted in the tissue between fascicles of muscle fibers. This parasitosis remains rare even in country of endemic disease as our country. The frequency varies according to the authors of 1 at 5% (2, 3). The reported muscular localizations are the diaphragm (4), the big pectoral muscle, the brachial muscles, the sartorius (2, 4) and the muscle psoas (2, 3).

The muscle is generally very resistant to the hydatidosis because it tends to divide up and to encapsuler the larva as well as the contractile activity and the production of lactic acid (4-6).

The clinical symptom is very variable, It is especially necessary to underline the clinical latency because of the depth of the muscle psoas and of the slowness of growth of the hydatid cyst. He can involve of fortuitous discovery for the echograph or for the scanner (observation 3) or even to dress a misleading shape which can make roam the diagnosis and the diagnosis is put only in per operating (observation 4).

The secondary infection and the fissuring of the cyst can give a symptom of anaphylactic shock even of peritonitis in case of break (4, 7).

The medical imaging allows in the majority of the cases to make the diagnosis (6, 8). The radiography of the belly without preparation show especially a disappearance of the external edge of the psoas, the calcifications are rare under forms of a curvilinear border (4, 6, 8), or an opacity falling on the psoas (6), the extrinsic images of expansion, compression of the colonist or the ureter (9). The abdominal echograph allows in the majority of the cases to assert the hydatid nature of the cyst and his seat, it usually shows an image divided up in nest of bee, sometimes calcifications (3,6). The scan confirm the diagnosis and allows to specify better the retro peritoneal seat of the cyst and to eliminate certain affections which can lend confusion as the retro peritoneal tumors, embryogenic cysts and teratomas (10).

The more precise magnetic resonance imaging in the determination of the morphology, the topography and the reports with the nearby structures in particular vasculo nervous (11).

The treatment is essentially surgical, it is the only radical treatment allowing to confirm the diagnosis and to assure a complete cure.

For the way at first, many authors recommend the lombotomy to avoid the sowing of the peritoneum cavity (2, 3, 6, 8-10). Some people prefer the oblique way of the side with progress under peritoneal (4, 6, 12). The trans peritoneal way in case of associated intra peritoneal localization (6, 9, 13).

The risk of peritoneal sowing is almost nil in our experience of hydatid surgery if the rules of usual protection are respected. The treatment of the hydatid cyst is identical to the other localizations. The protection and the sterilization of the parasite is made by means of the hydrogen peroxide. The pericystectomy must be careful and has to stop if there is a vascular, ureteral or nervous risk (14, 15).

The cruralgias connected to the irritation of the nerve can see itself as it was the case for one of our patients (6) and this probably by aggression of the nerve by coagulation or during the manipulation.

The second recurrence was reported as for all other localizations (8, 13, 14, 16) this justifies a clinical and radiological surveillance. For our five cases. No case of second recurrence was indicated.

4. Conclusion

The hydatid cyst of the psoas is a rare affection with slow development, it is always necessary to think to it at subjects
living in a country with high endemic disease and to ask for necessary complementary examinations to make the diagnosis and avoid therapeutic errors.

The eradication of this affection rests on the disease prevention by the sanitary education of the populations, the surveillance of the slaughter animals, the treatment of the domestic dogs and the systematic euthanasia of stray dogs.

References


