

Torsion of a wandering spleen A case report

Néjib Kaabar, Rabiaa Ben Abdallah, Housseem Yengui, Youssef Hellal, Riadh Ben Malek, Habib Bouthour, Sadok Sayed .

Service de chirurgie pédiatrique, Hôpital Habib Thameur, Tunis, Tunisie

N. Kaabar, R. Ben Abdallah, H. Yengui, Y. Hellal, R. Ben Malek, H. Bouthour, S. Sayed .

Torsion d'une rate ectopique. A propos d'un cas

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R É S U M É

Prérequis : L'ectopie de la rate est une entité rare chez l'enfant. Elle est due à une hyper laxité ou à un défaut de développement des ligaments spléniques qui entraînent la migration de la rate de son siège anatomique normal vers une autre localisation abdominale ou pelvienne. Elle peut être congénitale ou acquise. La complication la plus redoutable est la survenue d'une torsion de la rate autour de son pédicule.

But : Rapporter une nouvelle observation et présenter les aspects diagnostiques, thérapeutiques et évolutifs de la torsion de la rate ectopique.

Observation : Nous rapportons le cas d'une fille âgée de 17 ans, qui a consulté pour un syndrome abdominal aigu douloureux et fébrile. L'examen clinique a montré une défense abdominale généralisée et une masse sous ombilicale très douloureuse à la palpation. L'échographie et la tomodensitométrie ont visualisé la masse pelvienne qui mesurait dix centimètres de grand axe. La rate était absente à son siège normal. La patiente fut opérée en urgence. L'exploration chirurgicale a montré que la masse correspondait à une rate ectopique en position pelvienne, nécrosée et tordue autour de son pédicule. Une splénectomie a été réalisée avec des suites simples.

Conclusion : la torsion de la rate ectopique peut évoluer vers la nécrose totale de la masse splénique. Cette complication est à craindre devant toute rate ectopique et douloureuse.

Mots-clés

Rate, ectopie, Torsion, Splénectomie, Splénopexie

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S U M M A R Y

Background: Wandering spleen is a rare entity in child. It is generated by laxity or failure of development of spleen ligaments causing the migration of the spleen from its normal anatomical site to another abdominal or pelvic location. It can be congenital or acquired. The most dangerous complication is the occurrence of torsion of the spleen around its pedicle.

Aim: Report of a new observation and present the diagnostic, treatment and outcome aspects of torsion of ectopic spleen.

Case: We report the case of a 17 years old girl who was admitted for an acute abdomen pain and fever. Clinical examination revealed generalized abdominal defence and an under umbilical mass which was very painful on palpation. Ultrasound and CT scans have visualized the pelvic mass, which measured four inches long axis. The spleen wasn't on its normal seat. The patient was operated urgently. Surgical exploration showed that the mass corresponded to a wandering spleen in pelvic position, necrotic and twisted around its pedicle. A splenectomy was performed with simple sequences.

Conclusion: torsion of the wandering spleen can progress to total necrosis of the spleen mass. This complication is feared in any ectopic and painful spleen.

Key - words

Spleen, wandering spleen, Splenectomy, Splenopexy

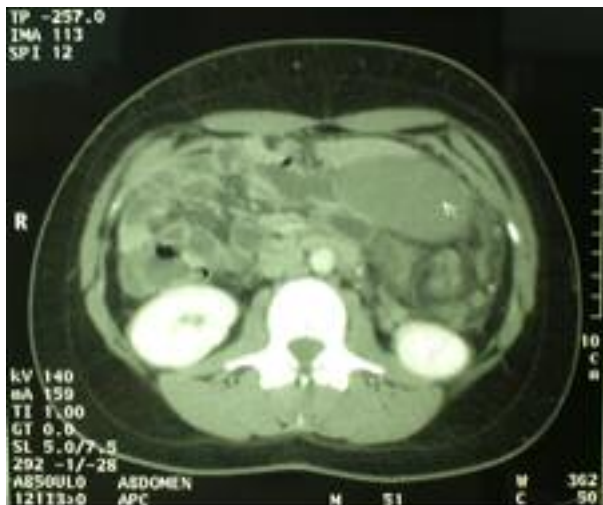
Wandering spleen is a rare condition, characterized by a migration of the spleen in anywhere in the abdomen or pelvis. It's due to a defect in its anatomical fixity. It can be congenital or acquired. It can lead to a torsion and spleen infarct. The Clinical presentation of a wandering spleen is variable; patients can be asymptomatic. They can have recurrent sub acute abdominal crises secondary to the twists and untwists of the spleen pedicle. The most frequent case for child is the acute surgical abdomen due to the torsion of spleen pedicle. We report an unusual case of torsion of a wandering spleen discovered by acute peritonitis. The spleen was necrotic, so it was resected.

CASE REPORT

A 17 years old girl presented four days before admission abdominal pain, vomiting and fever. She had a past history of abdominal trauma.

The Physical examination found a patient with a bad general state and fever at 39°C. The abdominal exam revealed general abdomen defense and hypogastric painful hard mass. The ultrasonography and CT-scan revealed that the spleen was not found in its normal anatomical position. However, it was seen in the pelvis with one size of 21x10x5cm, in contact of the bowel which was repressed (fig1). The spleen place was occupied by the stomach and the left angle colon (fig2). The preoperative diagnosis of acute torsion with infarction of wandering spleen was made.

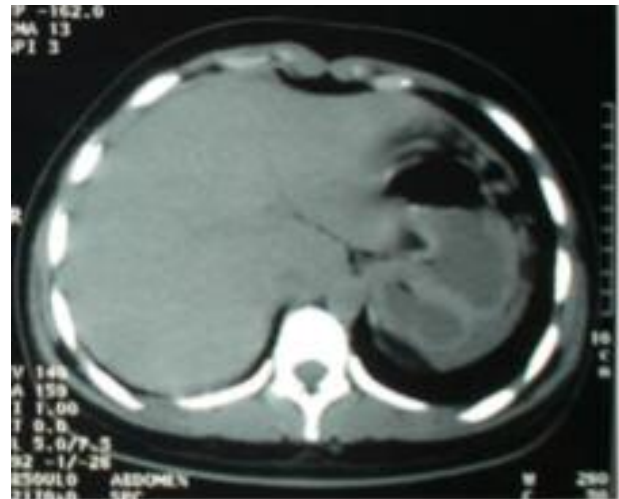
Figure 1 : CT-scan: the spleen is in the pelvis



After reanimation, a laparotomy was carried and objectified the spleen in pelvis, without ligaments. It was necrotic and twisted around its pedicle. Splenectomy was performed .the anatomopathologist exam concluded that the spleen weight was 580g and contained hemorrhage and thrombosis. After the splenectomy, the patient received immunizations to

meningo-cocci and pneumo-cocci. She was also placed on oral penicillin. These precautions are taken in all of our post-splenectomy patients to prevent overwhelming infections.

Figure 2 : CT-scan: The spleen space is occupied



DISCUSSION

A wandering spleen is defined as a migration of the spleen from its anatomic location in anywhere in the abdomen or pelvis(1,2). The incidence is less than 0,5%(3). It preferentially affects children and adolescents. It's usually described in adults(6), especially women of childbearing age(5). It's caused by absence of fixing ligaments of spleen or failure of development of dorsal mesogastrium which explains the high incidence in child(7).The undeveloped system fixation of the spleen results in a long vascular pedicle and mobile spleen which favorites torsion and infraction.

A wandering spleen is generally discovered incidentally. The clinical presentation is variable; patients may be asymptomatic or they may have acute abdominal crises or chronic vague lower abdominal pain. The most common presentation in children is an acute surgical abdomen occurring due to trauma or twisting spleen pedicle. an abdominal mass may be found corresponding to the wandering spleen.

A radiographic abdominal may be quite difficult to precise that the left upper quadrant of the abdominal is no occupied by the spleen. Ultrasonography is being considered to be the most reliable for diagnosis of wandering spleen(8,9). Actually, it's showing that the spleen is absent from its usual location which is occupied by the stomach and colon and often identifies an echogenic mass anywhere in the abdomen. Doppler sonography helps in the evaluation of organ blood flow. The computed tomography (CT), magnetic resonance imaging (MRI) and scintigraphy helps also to diagnosis. When the diagnosis of wandering spleen is made, splenopexy is a surgical option to avoid complication, but when there is torsion of the spleen pedicle and infarction, splenectomy is performed.

CONCLUSION

The torsion of the spleen pedicel is the most frightening complication in the wandering spleen. The diagnosis can be

evoked with acute abdominal crises and a tender mass. Doppler sonography helps in the evaluation of organ blood flow. Detorsion and splenopexy is a surgical option but when there is an infraction spleen, splenectomy is performed.

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