



Journal Homepage: - [www.journalijar.com](http://www.journalijar.com)

## INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/16563

DOI URL: <http://dx.doi.org/10.21474/IJAR01/16563>



### RESEARCH ARTICLE

#### INTUSSUSCEPTIONIS IN ADULT, CASE REPORT OF ACUTE INTUSSUSCEPTION DUE TO METASTASIS FROM A TESTICULAR TUMOR

**Rachid Ait Ben Addi, Wafae Ait Blaid, Tariq Ahbala, Khalid Rabbani and Abdelouahed Louzi A.**  
CHU Mohamed VI, Marrakech Faculty of Medicine and Pharmacy, Cadi Ayyad University of Marrakech.

#### Manuscript Info

##### Manuscript History

Received: 31 January 2023

Final Accepted: 28 February 2023

Published: March 2023

#### Abstract

Intestinal intussusception is a rare pathology in adulthood and often secondary to an organic cause, reporting the observation of a young 36-year-old patient with no particular pathological history, who was diagnosed with intussusception due to metastasis of a testicular tumor.

*Copy Right, IJAR, 2023,. All rights reserved.*

#### Introduction:-

Intussusception is defined when one portion of the gut becomes invaginated with another immediately adjacent to it. It can affect any segment of the digestive tube. It is an essentially paediatric pathology which affects infants and young children in whom it is mostly idiopathic or primitive in origin. In adults this pathology is relatively rare and is often secondary to an organic cause.

We present a rare case of acute intussusception metastasis of a germ cell tumor of the testis in a young man aged 36 years which was revealed by digestive haemorrhage associated with bowel obstruction syndrome.

#### Case study

A 36 year old patient without any past medical history admitted in the enterogastric department for etiologic investigations of digestive haemorrhage in form of melena associated with intermittent abdominal pain which persisted for a month before his admission. The patient had no fever but his general condition was altered. During his stay in hospital the patient developed bowel obstruction syndrome and had presented the following symptoms; inability to pass gas and stool, vomiting and there was an increase in the intensity of the abdominal pain; this persisted for at least 48 hours. During clinical examinations the patient was conscious, hemodynamically stable and had no difficulty breathing. The patient was afebrile, had discoloured conjunctiva, had a slightly bloated abdomen with thickening-out of the epigastric region and generalized cramping abdominal pain. During the genitourinary exam; a left unpainful swollen testicle was found (figure 1).

#### Laboratory tests:

##### Haemoglobin:

5,5g/dl WBC: 12000 e/mm<sup>3</sup> PT: 87%

##### Platelets:

255000 BHCG: 805888 AFP: 2.8

An abdominal X-ray was done and it showed small bowel "air-fluid levels"

**Corresponding Author:- Rachid Ait Ben Addi**

Address:- CHU Mohamed VI, Marrakech Faculty of Medicine and Pharmacy, Cadi Ayyad University of Marrakech.

A complimentary CT-scan showed small bowel invagination with thickening of the affected loop. They were also distended in addition to the presence of 3 nodular lesions situated at segments III, IV and VI of the liver associated to sub diaphragmatic lymphadenopathy.

The patient was operated on in urgency; the initial intervention consisted of median laparotomy and after exploration a large hemoperitoneum was found with invagination of the small bowel located 1m from the angle of treitz centred by a lesion measuring 4x3 hemi circumferential without any signs of suffering but with similar characteristics situated at the second jejuna loop (figure 2). The liver is truffle with metastasis with the presence of 3 haemorrhagic lesions; the 1<sup>st</sup> located on the edge of the III segment and measured 3x3cm, the 2<sup>nd</sup> on the IV segment then the 3<sup>rd</sup> on the VI segment (figure 3).

The first intervention consisted in a grelic resection taking the intussusception and biopsy of a hepatic lesion

The second intervention consisted of an orchiectomy through the inguinal route.

Anatomical pathology exam: Its morphological, immunological and histochemical finding was consistent with that of a non-seminomatous germ cell tumor specifically choriocarcinoma classed PT2NxM1b.

The post-surgery follow up was simple and the patient was discharged 5 days post-surgery. He was then addressed to the department of oncology for adjuvant chemotherapy.

### **Discussion:-**

Testicular cancer is rare in adults. From an epidemiologic point of view; testicular cancer only represents 1 to 2 % of cancers in men (3.5% of tumors of the genitourinarysystem) but it is most common in young adults between the ages of 20 and 35 years and represents almost 30% of malignant tumors.

Choriocarcinoma is a very rare and aggressive form of testis cancer (1). It's a malignant germ cell tumor with trophoblastic differentiation; it is often diagnosed in patients between the ages of 30 and 40 years(2). It is a BHCG secreting tumor and is thus always accompanied by elevated BHCG levels.

Choriocarcinoma classically manifests itself in form of a testicular mass and evidence of foci of solid tumors.

It is characterised by its high metastatic nature as shown in a series of 15 patients in a report by Alvarado cabrela et al in which all the patients were diagnosed at the metastatic stage and 3 of those were located in the digestive tube. This can maybe be explained by the lymphophilic character of choriocarcinoma(3).

Acute Intussusception is defined as the penetration of a segment of the intestine into the segment just adjacent to it. It represents 1 to 5 % of causes of bowel obstructions in adults. An organic cause is found in 70 to 90% of cases and it is idiopathic in 8 to 20% (4; 5). Acute intussusception is often secondary to organic causes (90% of cases), either benign or malign tumors (50-90%) or inflammatory lesions (appendicitis, Meckel diverticulitis) or adhesions. In the small bowel the most frequent are benign tumors in contrast to the large bowel in which they are usually malignant. The malignant primitive tumors of the small bowel include but are not limited to (adenocarcinoma, lymphoma, carcinoid, leiomyosarcoma, or metastatic (melanoma) representing 6 to 30% of cases (6).

Its diagnosis is difficult and is most often done in per-operation in face of an obstruction. It frequently manifests by non-specific signs and has episodic variations, which leads to delayed diagnosis; rarely does it present in form of an acute syndrome linked to obstruction or perforation.

CT-scan is the imaging of choice in adults. It allows us to distinguish intussusception from other causes of bowel obstruction. It shows a mass of tissue density which corresponds to the oedematous wall of the invaginated loop, accompanied by an eccentric crescent image of fatty density which corresponds to the mesentery. Sometimes this helps to identify the causative lesions for example; fat density of a lipoma(7).

Surgical intervention must be systematic in adults, which allows an intestinal resection to be performed and must be carcinogenic in nature in the presence of an underlying malignant tumor.

**Conclusion:-**

Intestinal intussusceptions in adults is a surgical emergency that requires exploration with systematic resection while remaining carcinogenic since it can be secondary to a tumor lesion.



**Figure 1:-** swollen left testicle.



**Figure 2:-** 2 lesion of the small bowel located 1m from the angle of treitz responsible of intussusceptionis.



**Figure 3:-** liver metastasis.

**References:-**

- 1 : Krag Jacobsen G, Barlebo H, Olsen J, et al. Testicular germ cell tumours in Denmark 1976-1980. Pathology of 1058 consecutive cases. *ActaRadiolOncol.* 1984;23:239–247
- 2 : Alvarado-Cabrero I, Hernández-Toriz N, Paner GP. Clinicopathologic analysis of choriocarcinoma as a pure or predominant component of germ cell tumor of the testis. *Am J SurgPathol.* Janv 2014;38(1):111 8.)
- 3: Alvarado-Cabrero I, Hernández-Toriz N, Paner GP. Revisiting the atypical or so-called “anaplastic” seminoma with emphasis on diffuse atypia. *Mod Pathol.* 2013;26:193A.
- 4: C Toso , Erne, P M Lenz. Intussusception as a cause of bowel obstruction in adults. *Swiss Med WKLY.* 2005; 135:87-99. This article on PubMed
- 5: Huang BY, Warshauer DM. Adult intussusception: diagnosis and clinical relevance. *RadiolClin North Am.* 2003; 41:1137-1151. This article on PubMed
- 6 : Oyen TL, Wolthuis AM, Tollens T, Aelvoet C, Vanrijkel JP. Ileoileal intussusception secondary to a lipoma: a literature review. *ActaChirBelg* 2007;107:60—3.
- 7: Eisen LK, Cunningham JD, Aufses Jr AH. Intussusception in adults: institutional review. *J Am CollSurg* 1999;188:390—5.