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### **Clinical case**

### Large ulcerated tumor fibrosing post-injection buttock: about a case

Volumineuse tumeur ulcérée fibrosante fessière post-injection : à propos d'un cas

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#### Résumé

Patient de 14 ans, élève qui présentait de la fièvre, douleur abdominale qui avait reçu une injection dans la fesse gauche. Après de 2 mois il a ressenti une tuméfaction avec une ulcération et une biopsie a été réalisée qui avait mis en évidence une fibrose collagénique. Une exérèse tumorale large a été réalisée. Le résultat était satisfaisant.

Conclusion: l'injection intra-musculaire des produits, est trop souvent à l'origine de complications (abcès, hématome, paralysie), mais la survenue d'une tumeur fibrosante collagénique est rare.

Mots-clés: tumeur, injection, fibrose, collagène.

### **Abstract**

14-year-old patient, student who had fever, abdominal pain who had received an injection in the left buttock. After 2 months he felt swelling with ulceration and a biopsy was performed which had highlighted collagenic fibrosis. A large tumor excision was performed. The result was satisfactory.

Conclusion: intramuscular injection of the products is too often the cause of complications (abscess,

hematoma, paralysis), but the occurrence of a collagenic fibrosing tumor is rare.

Keywords: tumor, injection, fibrosis, collagen.

### Introduction

Fibrosis is a pathological condition characterized by the presence of various scar changes. The occurrence of post-injection fibrosis is rare. We report the case of muscle fibrosis of the left buttock following an injection.

### Clinical case

Child A. Y., aged 14, a pupil who had presented with fever, vomiting and abdominal pain, who had consulted a school clinic where he had received two injections of metamizole and metoclopramide in the left buttock. No family history of tumor. After a period of 2 months, he had felt a swelling of the left buttock, a progressive increase in the tumor mass. This mass was at the level of the left buttock was painless, hard,

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mobile in relation to the superficial plane and fixed in relation to the deep plane, an ulcerated area of 5x7 cm with a whitish background, without locoregional lymphadenopathy, an amyotrophy of the left thigh. Computed tomography of the pelvis revealed a large mass of the left buttock (Figure 1) infiltrating the gluteal muscles with nodular images without bone involvement. A surgical biopsy (Figure 2) had been performed: the histological study was in favor of a benign tumor without signs of malignancy, with a predominance of elastic hyaline collagen.

Surgical excision was decided, the patient was installed in the prone position with logs under the pubic and thoracic region. The tumor was multinodular, whitish, hard, the gluteus maximus muscle was partially sacrificed to obtain complete excision of the mass (Figure 4)

The operative piece measured 25x16 cm and weighed 1215g made of massive fibrotic tissue similar to scar tissue. Histology had led to the conclusion of collagenic fibrosis. The postoperative effects were simple.

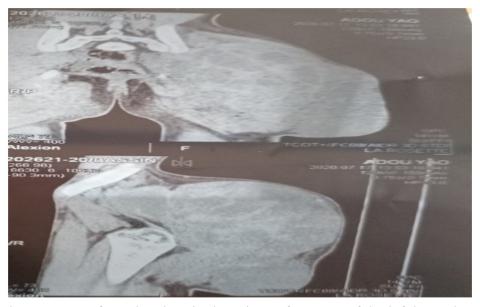


Figure 1: MRI frontal and sagittal sections of a tumor of the left buttock



Figure 2 A and B: large tumor of the left buttock dominant upper and lower



Fig.3 Intraoperative excision of the tumor mass



Fig.4 17-month postoperative follow-up

### **Discussion**

The administration of drugs into the body by intramuscular route is a nursing act described by BESNIER in 1887. This gesture performed in the upper-outer quadrant of the buttock is in principle harmless (1). In some cases, tissue damage may occur, manifesting itself in the appearance of ulcers and other inflammations at the site of pathology (2). In our case, we were unable to determine which of the two injected products was responsible for this fibrosis. We found that in the dispensaries, in some of them, the nursing villages combined products in the syringes for a single injection. But was the tumor due to an isolated injection of one of the products or a combination of other products?

In the literature we have noted cases of quadricipital fibrosis following the intramuscular injection of Quinimax (3)

In Switzerland, a case of painful muscle fibrosis following synthol injections has been reported in a bodybuilder treated by excision of the fibromatous mass.(4) Local inflammatory and ischemic changes after intramuscular injections create a breeding ground for microbial contamination; This aggravating factor may explain the cases of hip necrosis or arthritis reported in the literature(5). However, the occurrence of a large fibromatous tumor is rare. According to Christian Bonnet, micronodules are formed containing 50 to 100 adipocytes encapsulated by collagen fibers. This is the consequence of the interadipocyte passage of water and proteins.(6)

For Dujardin et al., if the tumor is deep or if, even superficial and large, the treatment requires a locoregional extension procedure, at best by surgical resection, an MRI assessment must be performed. This MRI is used to guide the biopsy and plan resection if the tumor turns out to be sarcoma (7).

The diagnosis was not only based on a typical clinical image, but also on the basis of studies that made it possible to detect tissue or systemic fibrosis.

The treatment in our case was surgical with a total excision of the tumor with a resection margin of 2 cm

#### Conclusion

Fibrosis of the gluteal muscles most often occurs at the bottom of the existing inflammatory process. This reaction of the body can be induced by the injection of certain products (antibiotics - Sulfasalazine, nitrofurantoin, methotrexate, cyclophosphamide). When fibrosis is large, surgery remains the only alternative.

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