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## REVIEW / PRACA POGLADOWA

Artur Szumlański, Karol Piechocki, Marcin Nowak

# PSEUDOTUMOR AS A COMPLICATION AFTER TOTAL HIP REPLACEMENT

## GUZ RZEKOMY JAKO POWIKŁANIE PO PROTEZOPLASTYCE STAWU BIODROWEGO

Department of Traumatology and Orthopedics, Multidisciplinary Hospital in Inowrocław. Acting head: Artur Szumlański, PhD

## Summary

Pseudotumor trochanteric region after hip replacement is rarely described in the literature. The cause of the tumor is not clear. Metalosis that occurred in this case was established as a result of increased abrasion artificial elements on the border of metal-polyethylene articulation. Authors depict stages of proceedings and they give possible reasons for the treatment of patients after total different joints.

## Streszczenie

Guz rzekomy okolicy krętarzowej po protezoplastyce bezcementowej stawu biodrowego rzadko jest opisywany w literaturze fachowej. Przyczyny powstania przedstawionego guza nie są jednoznaczne. Metaloza, która wystąpiła w tym przypadku, powstała w wyniku zwiększonej ścieralności elementów protezy na granicy artykulacji metal-polietylen.

Autorzy pracy przedstawiają kolejne etapy postępowania, możliwe przyczyny i poddają pod rozwagę sposób postępowania z pacjentami po protezoplastykach dużych stawów.

*Key words:* pseudotumor, the centralizing pin, artificial elements of metal-polyethylene, metalosis, total hip replacement. *Słowa kluczowe:* guz rzekomy, trzpień przynasadowy, artykulacja metal-polietylen, metaloza, protezoplastyka stawu biodrowego

## INTRODUCTION

The notion of 'pseudotumor' was first used by Pandit [1] to describe changes of soft tissue tumors seen in clinical ultrasound, KT, and MRI, no signs of inflammation and malignancy accompanying metal-to metal articulation. Pseudotumor is described in many studies [2,3,4,5]. This situation occurs in case of incorrect hip replacement. There

are few studies that point to the presence of pseudotumor with metal-polyethylene articulation [6].

In this study we would like to introduce the case of pseudotumor, formed after the articulation with the use of the prosthesis and polyethylene pan with candle.

A case report:

Patient, aged 24 years old, came to the orthopedic clinic because of the pain in both hip joints. Interview revealed that

during childhood she was treated with glucocorticoids (was due to on illness of the respiratory system of an asthmatic). In the X-ray visible necrosis of the femoral head with joint space narrowing and a small collapse of the articular surface of the femoral head were observed.



RTG

Fig 1. Radiograph (date: 08.09.2009)

Patient was treated conservatively, applying physical therapy and non-steroidal anti-inflammatory drugs physiotherapies. The patient had an awful pain. She was qualified to the surgery.



RTG

Fig 2. Radiograph (date: 14.03.2011)

On 16.06.2011 operation of cementless total hip replacement was performed. Doctors came to cut bag hip arthritis and femoral hip. They implanted acetabular polyethylene and ink (press-fit 48mm). The procedure was performed with antibiotic prophylaxis and antithrombotic. The patient was discharged 8 days after surgery.



#### RTG

Fig 3. Radiograph (date: 20.06.2011)

On 03.02.2012 the patient had metaphyseal hip arthroplasty with the use of Nano implants (left hip) performed.

Postoperative course was without complications so she was discharged six days after the operation.



RTC

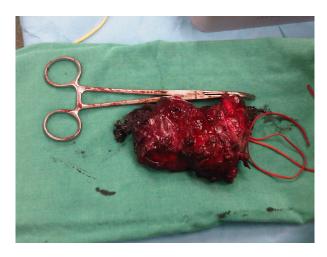
Fig 4. Radiograph (date: 07.02.2012)

About 5 months after the surgery, the patient came to the clinic because of a palpable tumor on the posterior side of the right hip joint without pain. In the x-ray there are visible changes of a periprosthetic calcification. The right-hand side there is a destruction of the top edge of the acetabulum and the upper surface of the head. The patient was qualified for urgent surgery.



РНОТО

Fig 5. The course of the surgery to remove pseudotumor (1) Tumor, of the size of the particles of fluid-filled black metal.



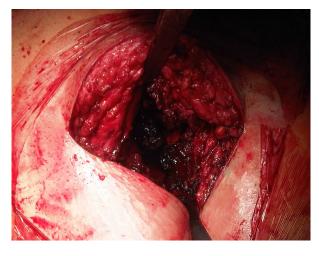
РНОТО

Fig 8. Tumor removed.
Soft tissue with features metalosis has been removed.



РНОТО

Fig 6. The course of the surgery to remove pseudotumor (2)



## РНОТО

Fig 9. The course of the surgery to remove the pseudotumor (4). Then, the doctors came to implants and dentures were heads off to the equator along with pant of the stem.



## РНОТО

Fig 7. The course of the surgery to remove pseudotumor (3) After isolation of the tumor and the tumor stalk ligation was completely removed.



РНОТО

Fig 10. Deleted item prosthesis (1)

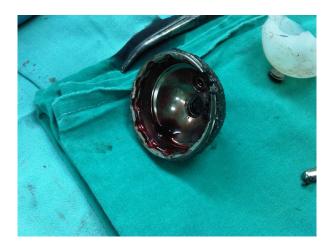


PHOTO Fig 11. Deleted item prosthesis (2)



PHOTO Fig 12. Deleted item prosthesis (3)



Fig 13. Deleted item prosthesis (4)
After removing the prosthesis implanted prosthesis metaphyseal
Nanos for bigger size.



RTG
Fig 14. Radiograph (date: 02.07.2013)
Nowadays, 15 months after surgery, patient without pain, without limitation, movable.

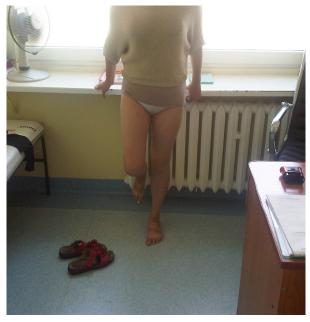


Fig 15. Current clinical status
After surgery, the patient gave birth to a healthy child!

# DISCUSSION:

The presented case brings a few questions and indicates important issues of regular control of patients with hip replacement (large joints). It is difficult to clearly indicate the primary cause of this condition. The important issue of this case was the early diagnosis and undertaking appropriate treatment. Butlock tumor surgical site in patients may be a symptom of mechanical complications within the prosthetic implants.

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Address for correspondence:
Publiczny Specjalistyczny Zakład Opieki Zdrowotnej
w Inowrocławiu
Oddział Ortopedyczno-Urazowy,
88-100 Inowrocław ul. Poznańska 97:
Dr n. med. Artur Szumlański

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