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Case Study

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# THE REVERSE SHOULDER PROSTHESIS (RP) IN RHEUMATOID ARTHRITIS (RA) IN A YOUNG PATIENT ABOUT OF A CASE

**El Hassani Abdelkrim*[1], Douma Hicham[1], Faycal Rifki[1], Ouahb Azriouil[1], Daoudi Mohamed[1], Laila Liqali[2], Dihi Basma[2], Khalid Koulali Idrissi[1]**

[1]Trauma-Orthopedic Service Avicenne Military Hospital Marrakech Faculty of Medicine and Pharmacy Marrakech Cadi Ayyad University Marrakech.

[2]Rheumatology Service Avicenna Military Hospital Marrakech Faculty of Medicine and Pharmacy Marrakech Cadi Ayyad University Marrakech.

***Corresponding Author: Dr. El Hassani Abdelkrim**

Trauma-Orthopedic Service Avicenne Military Hospital Marrakech Faculty of Medicine and Pharmacy Marrakech Cadi Ayyad University Marrakech.

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## ABSTRACT

The Prosthesis reversed is one of the treatments of the osteo-articular pathologies of the shoulder with massive rupture of the cap among other things the achievement of the shoulder in the framework of the PR. We report the observation of a young subject aged 34 years followed for rheumatoid arthritis which is located mainly at the level of two shoulders for 09 years under treatment of the bottom, with poor progression due to poor compliance due to lack of financial means after the patient presented for a very advanced bilateral shoulder osteoarthritis, with a major handicap in daily and professional life which prompted his rheumatologist to refer him to our training for a possible surgery which gave very satisfactory results hence the interest to show the importance and motivate future surgeons to learn this surgery.

**KEYWORDS**: rheumatoid arthritis; reverse prosthesis; eccentric osteoarthritis.

## INTRODUCTION

Shoulder injury in RA is characterized by severe osteo-articular destruction associated with rotator cuff injury,explaining the failures of hemiarthroplasty or total anatomical prosthesis whose results degrade over time.[1] whereas IP has shown satisfactory results in terms of both pain and joint function by relying mainly on the deltoid muscle, but with some constraints related to the severity of destruction and terrain of patients weakened by polyarticular involvement and long-term corticosteroids.[2]

## PRÉSENTATION

-Mr HJ 34 years old; officer of right-handed profession, followed for PR for 09 years under treatment of the bottom with a bad evolution due to poor compliance related to lack of financial means. who has repeatedly presented for inflammatory pain at two very pronounced shoulders at right estimated 08 according to VAS outside any trauma.

- The symptomatology was aggravated by a limitation of active and passive movements of the shoulder with a major handicap in daily and professional life. after the patient was referred to our training for possible surgery.

- Clinical examination found a patient in good general condition; the normal-looking right shoulder without deltoid amyotrophy with a mobility area was: abduction = 70 *; antépulsion = 60*; rétropulsion = 20*; External rotation= 25*; internal rotation = 40*.

- Standard radiography objectified an advanced joint destruction responsible for mediating the joint spacing and complete pinching of the space under acromial testifying to the absence of rotator cap. The patient was installed in half seated position, with a first delto-pectoral pathway with a placement of a humeral side cup and a broad hemisphere of Glenoid side. With an immobilization elbow to the body for 3 weeks and rehabilitation focused on the deltoid muscle from the second post-operative day.

The results are as follows:

- Pain estimated at 1 based on VAS
- Abduction = 120*
- Antepulsion = 120*
- Retropulsion = 40*
- External rotation = 50*
- Internal rotation = 60*


**Figure 1: Bilateral osteoarthritis of the shoulder following RA.**

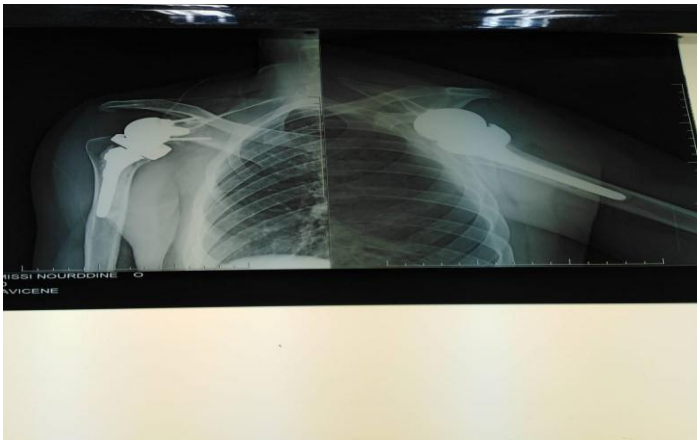

**Figure2 et 3: Postoperative abduction.**

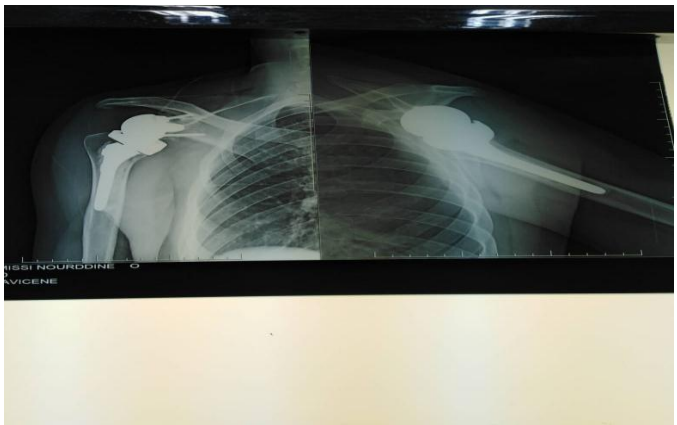

**Figure 4: X-ray face/profile showing RP.**

## DISCUSSION

- Initially this implant was used by Paul Grammont to meet the challenge of eccentric omarthrosis defined by Neer as the ultimate stage of the degenerative pathology of rotator cuff ruptures associating variable massive cuff rupture and osteoarthritis gleno-humeral.[3] first reserved for older patients; but given the satisfactory results over time the indications of this prosthesis have been extended to more complex sufferings of the gleno-humeral joint or omarhtrose with rupture of the cap or severe glenoid wear Despite the satisfactory clinical results that were shown in the first studies; very different complications were noted (infection; glenoid fever; instability, etc.) causing discussion about the continued use of it. nevertheless recent studies have shown a reduced complication rate due to the technical evolution of the implants and the surgical technique and its indications.[4]

- The advantages of this technique are:[2]

- A wide glenohsohere allowing wide amplitudes with prosthetic stability.
- Medialization of the center of rotation reduces the constraints on the glene and avoids early descent.
- Simple surgical gesture.

-The complications of this surgery are[3]

- Scapulo-humeral conflict between the medial edge of the humerus and the scapular neck or with the acromion due to medialization of center of rotation is the most common complication, it is prevented by an optimal prosthetic design.
- Infection: rare but severe.
- Iatrogenic: instability due to subscapular muscle injury in the delto-pectoral pathway.

## CONCLUSION

-Today RP represents within the framework of RA, the best option or the best compromise in the face of severe joint destruction and the significant risk of secondary deterioration[5]

**CONFLITS D'INTÉRÊT:** The authors do not declare any conflict of interest

## AUTHORS' PARTICIPATION

The redaction of the article and the bibliographical search were made by: Elhassani abdelkrim. correction and documentation were made by: Hicham douma, Faycal Rifki,Ouahb Azriouil, Daoudi Mohamed, Liqali laila and Khalid Koulali Idrissi.

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