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Openbare verdediging van/Public defence of

## Jean GOUBAU

Voor het behalen van de academische graad van 'DOCTOR IN DE MEDISCHE WETENSCHAPPEN' To obtain the academic degree of 'DOCTOR IN MEDICAL SCIENCES'

# The failing trapeziometacarpal joint: from joint saving surgery to the consequences of its replacement

Promotor: Prof. T. Scheerlinck Co-promotor: Prof. P-P. Casteleyn

**Friday 20 September 2013** Auditorium R. Vanden Driessche, 17:00 Faculty of Medicine and Pharmacy, Laarbeeklaan 103, 1090 Brussel

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#### Summary of the dissertation

Our knowledge regarding the anatomy and pathology of the trapeziometacarpal joint has evolved the last decennia. Recently some anatomic descriptions have enhanced our understanding in the pathophysiology of trapeziometarpal joint arthritis and the consequences of its surgical treatment.

The most striking feature is the description of the dysplasia of the trapezium and the importance of its slope in developing progressive arthritis. In the past, surgeons focused on the soft tissue stabilising options such as ligamentoplasty and osteotomy of the thumb metacarpal. The osteotomy of the trapezium was recently considered. We proposed a combination of both osteotomies together with a ligament reconstruction. In order to verify the feasibility, we analysed anatomically the vascularisation of the trapeziometacarpal joint. The combined technique and the mid term results of the addition-subtraction osteotomy to correct the increased slope of the trapezium and re-align the thumb metacarpal is reported.

In case of failure of this technique or in case of to evolved arthritis of the trapeziometacaral joint, joint replacement can be proposed. The best results are obtained only in case of failure of all conservative treatment. Despite good overall results of the proposed ball and socket replacement we noted a high incidence of de Quervain tenovaginitis following the implantation of these ball and socket prosthesis. The lengthening of the thumb following this surgical procedure has been investigated as a possible cause. A new test with a better sensitivity is proposed to diagnose de Quervain's disease.

### Curriculum Vitae

Jean F Goubau was born in Ghent (B) the 29<sup>th</sup> of June 1965. He started his studies at the UGent (University Ghent) in 1983 and obtained the degree of Doctor in Medicine, Surgery and Obstetrics in 1991. Immediately hereafter he started his training in Orthopaedic Surgery in the Department of Professor Dr René Verdonk at the University Hospital in Ghent. During and after his training as an Orthopaedic Surgeon he worked as an assistant and Chief of Clinic in S.O.S. Mains in Montpellier (F) with Professor Dr Yves Allieu. He was also research fellow at the Mayo Clinic in Rochester (Minnesota – U.S.A.).

In 1998 he started his career as a Consultant Orthopaedic Surgeon in the Department of Orthopaedics and Traumatology of the AZ Sint Jan in Bruges where he developed the Hand-, wrist- and microsurgery within this department. Since 2007, the Hospital Sint Jan is licensed as S.O.S. Mains within the FESUM (Fédération Européenne des Services Urgences Mains) network in Europe and in 2010 the center has been accredited as 'Hand Trauma Center'.

Since 2009 he is attached as Clinical Staff member to the department of Orthopaedics and Traumatology of the University Hospital in Brussels led by Professor Thierry Scheerlinck.

After joining the board of the Belgian Hand Group in 2004, he has been elected as President of this Society in 2010 for a period of two years. Afterwards he was assigned to the Presidency of the International Scientific Committee of the Annual Congress of the FESSH (Federation of European Societies of Surgery of the Hand) in Antwerp in 2012.

He is author of different international peer reviewed publications and chapters in Hand Surgery books.

Between 2010 and 2012 he was elected as a foreign consulting member of the Board of the Société Française de Chirurgie de la Main (GEM). Since several years he is active as instructor of the EWAS (European Wrist Arthroscopy Society) in Strasbourg (F) and Taichung (Taiwan – P.R.C.) and gives lectures in different Hand Surgery Meetings around the world.