



R.Bleton, Paris

TOTAL TRAPEZIOMETACARPAL PROSTHESIS : MY EXPERIENCE FROM 1989 UNTIL NOW

TOTAL TRAPEZIO METACARPAL PROSTHESIS :

- ✗ Metal hinge for the metacarpal, Polyethylene cup for the trapezium
- ✗ De la Caffiniere
- ✗ Prothèse Guepar
- ✗ Prothèse Isis



TOTAL TTMP = 55

2011-2013 : 7 PTTM VERSUS 46 TSA

✕ Total PT : 55



**EVOLUTION OF TOTAL PROSTHESIS VERSUS
TRAPEZIECTOMY**

- ✖ Upper limb surgeon (shoulder)
- ✖ Same technique from Hospital BICHAT R. Bleton Th. Dubert, Th. Bihel, Ch. Couturier (Neuilly, Paris, France)
- ✖ I receive no specific grants from anybody neither interested in celebrity, just my opinion



TOTAL TRAPEZIO METACARPAL PROSTHESIS : SAME TECHNIQUE

- ✖ Dorso lateral approach with the distal radial artery spared.
- ✖ Preparation with curette, never with motorized drill (only 1 beakage of the trapezium)
- ✖ Both components cemented, so motion is allowed immediately because the prosthesis is linked.
- ✖ Soft dressing for a week and splitting for dangerous and work for 3 weeks.



INDICATIONS

- ✗ Age > 60 years
- ✗ Retired or light work
- ✗ Dell Stage 2 or 3
- ✗ Trapezius big enough to accept the trapezius implant two size (small cup for Isis)

CONTRAINDICATIONS

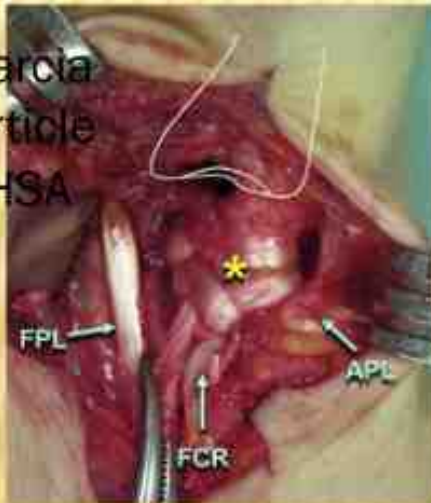
- ✗ Young heavy workers
 - + Trapeziectomy with ligamentoplasty



AGAINST

- ✗ Cochrane review (Wajon) :
no surgical procedure was
superior
- ✗ Simple trapeziectomy has
the lowest risk of
complications.

From Garcia
Ellias article
2014 JHSA



Pro : Dad told me!!!
Short incision
Quick recovery



WHY TOTAL PROSTHESIS ??

THUMB SUBSIDENCE

Garcia-Elias 2014

- ✖ Thumb subsidence is inevitable after removing the trapezium.
 - + Between 45 and 85%.
- ✖ Is correlated with weakness especially tip and key pinch.

**TOTAL TM PROSTHESIS
ALLOW PRESERVATION OF
THUMB HEIGHT**



- ✖ No infection
- ✖ 1 Per op breakage of the trapezium and switch to a trapeziectomy.
- ✖ 1 early breakage at 1 month,
- ✖ 2 late loosening of trapezium implant

RE-OPERATION WITH TRAPEZIECTOMY,
FILLING THE METACARPAL WITH PIECES
OF THE TRAPEZIUM ET STABILIZED WITH
LIGAMENTOPLASTY

COMPLICATION

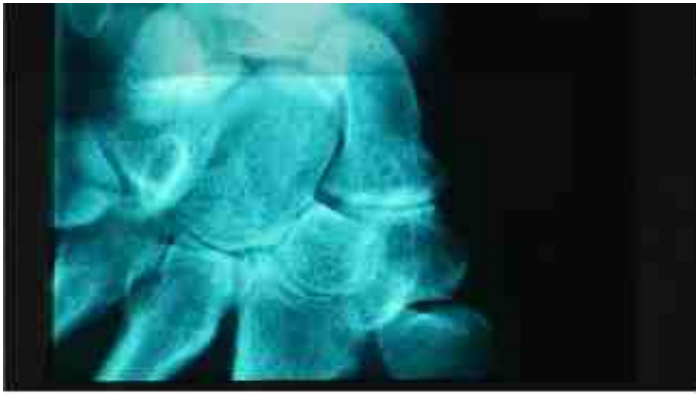




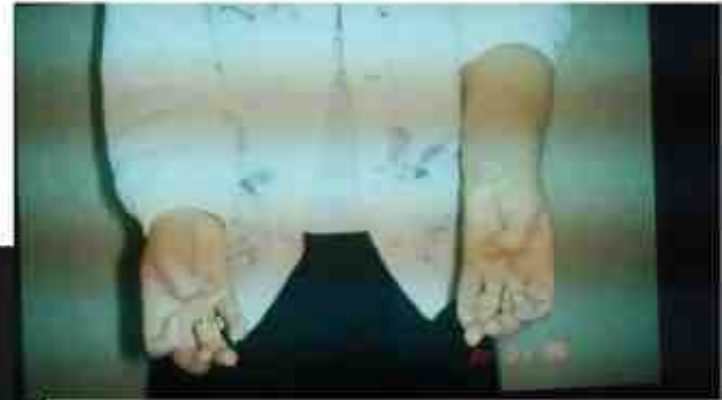
Re-operation with trapeziectomy with ligamentoplasty



- Kaszap (JHSE 2012):
The outcomes after revision surgery were comparable with those of primary trapeziectomy.



Worse case



Results

De la Caffinière TTMP / Johnston JHSE 2011 / 93PT for 71 patients :

- 27 patients with 36 PT died

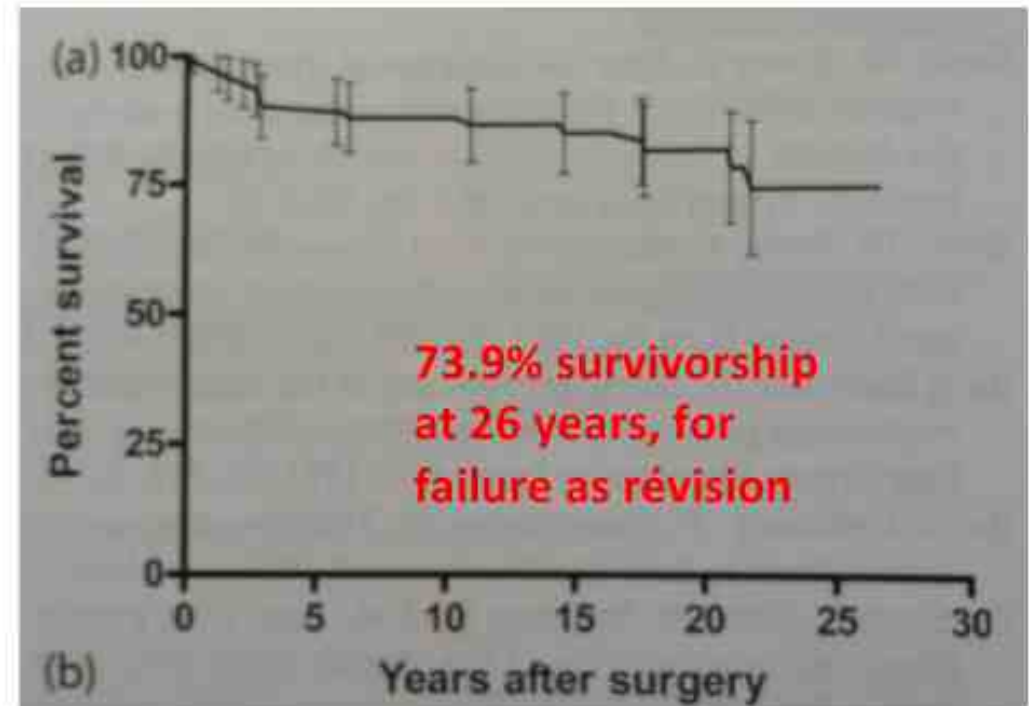
Follow up : 26 patients with 39 PT. 12-26 Years follow up

Full length article

De la Caffinière thumb trapeziometacarpal joint arthroplasty: 16–26 year follow-up

P. Johnston, A. Getgood, D. Larson, A. J. Chojnowski, A. J. Chakrabarti and P. G. Chapman

Department of Orthopaedics, Norfolk and Norwich University Hospitals NHS Trust

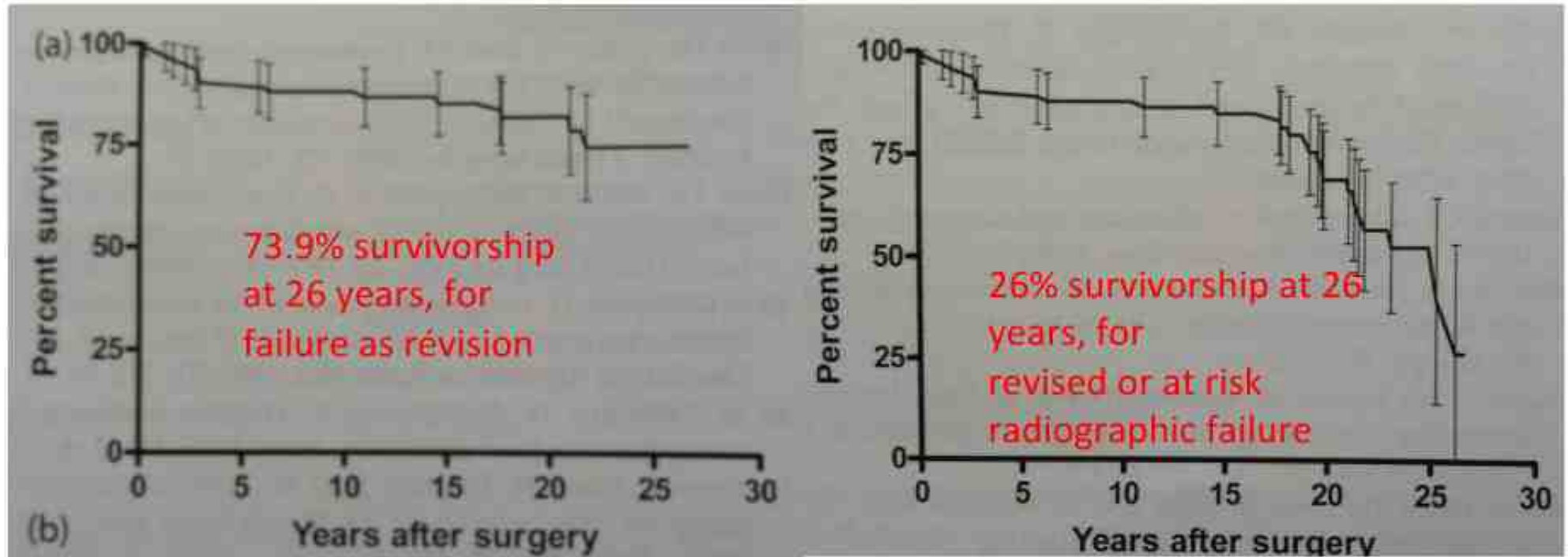


Results

De la Caffinière TTMP / Johnston
JHSE 2011 / 93PT for 71 patients :

This reflect an aging low demand population clinically satisfied with an implant despite loosening on radiographs.

Stability and satisfaction range 75% and 89% respectively



The future: Isis??

Seng, Chantelot Chir Main 2013

- 30PT with 93% survival rate at 42 month.
- Good and similar results :
 - Quick dash : 68.5 > 37.8
 - Kapandji : 9.1
- 30% abnormal radiographic images à 30 months
 - Non cemented prosthesis!!!
 - Klahn JHSE : Electra prosthesis 44% revision rate at 72 month





Conclusion

- Total carpo metacarpal prosthesis has good long-term outcome for cemented prosthesis like De la Caffinière.
- Good alternative to trapeziectomy for old ladies with low demand with quick and good return to daily activity

