



Preliminary results of the TACTYS implant, a PIP prosthesis.

Lionel ATHLANI, Etienne GAISNE, Philippe BELLEMERE,

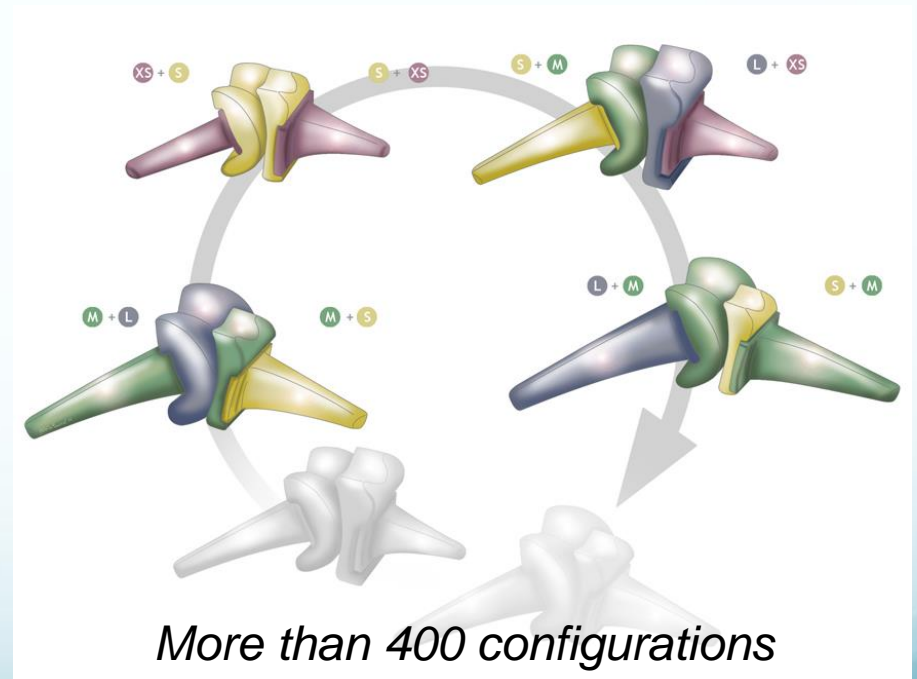
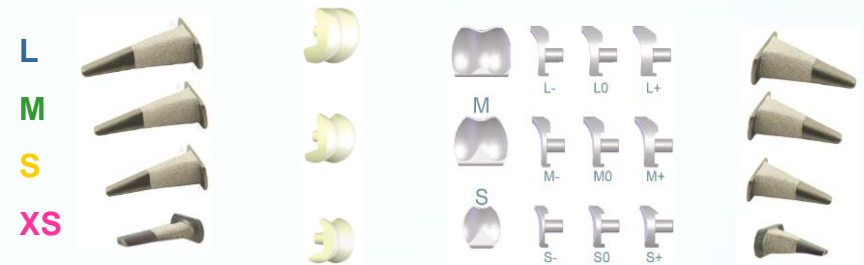


Nantes, France

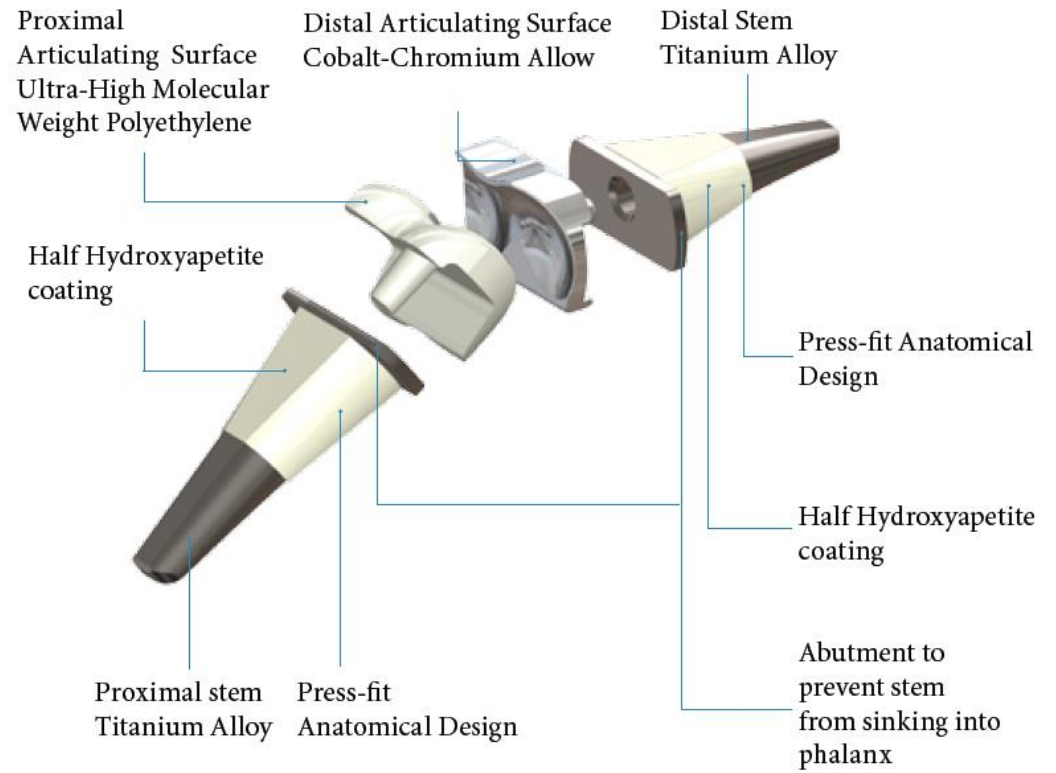
TACTYS PIP prosthesis

CONCEPT

- Memometal (Stryker)
 - Modularity +++
 - 4-parts prosthesis
 - Anatomical joint surfaces
 - Physiological movement
 - Soft tissues balancing
-
- Bone stock preservation
 - Good bone fixation
 - Easy revision in case of failure
 - Aim: to give a better alternative to conventional implants



● IMPLANT



● INSTRUMENTATION

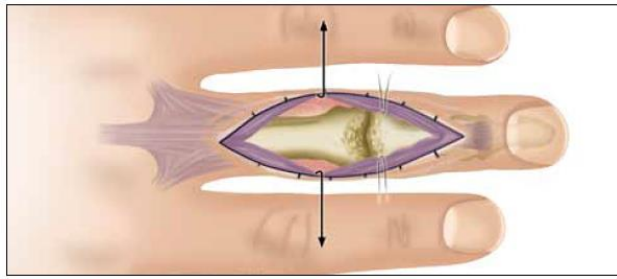


Proximal instrumentation

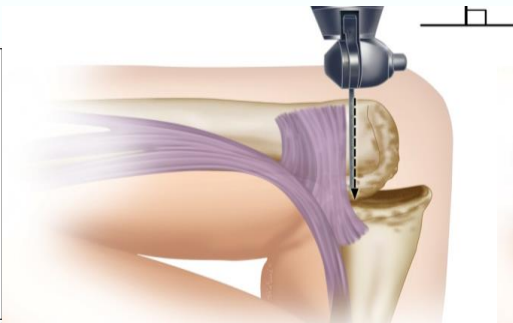
Trial implants

Distal instrumentation

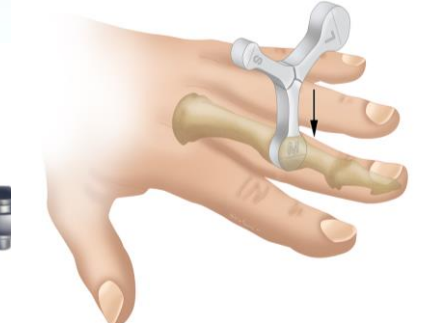
• **Surgical technique**



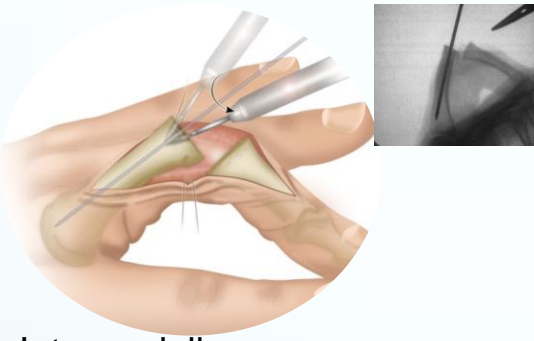
Dorsal median transtendinous approach



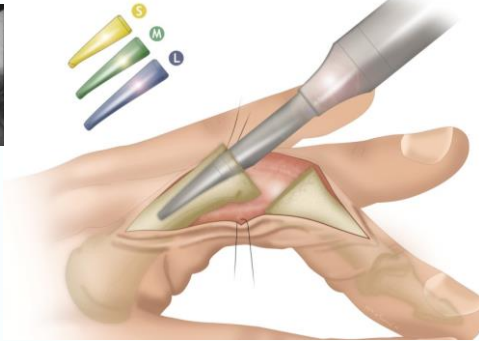
Orthogonal cuts



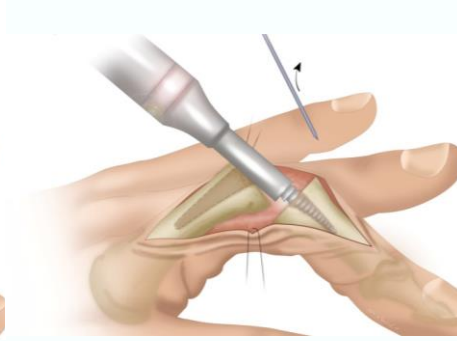
Sizing control gauge



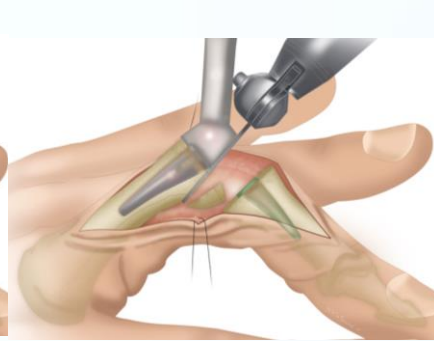
Intramedullary reamer
1,5 mm intramedullary pin



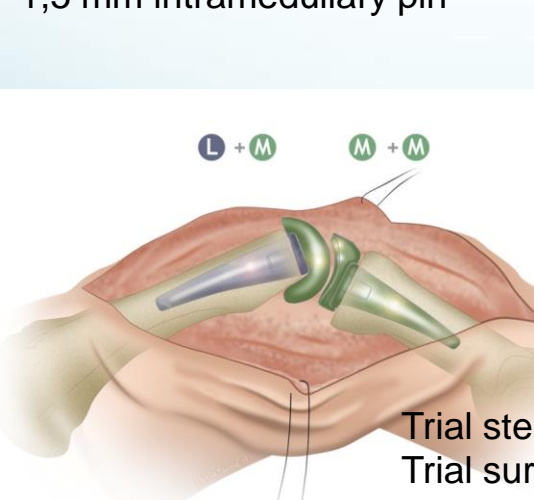
Progressive rasp



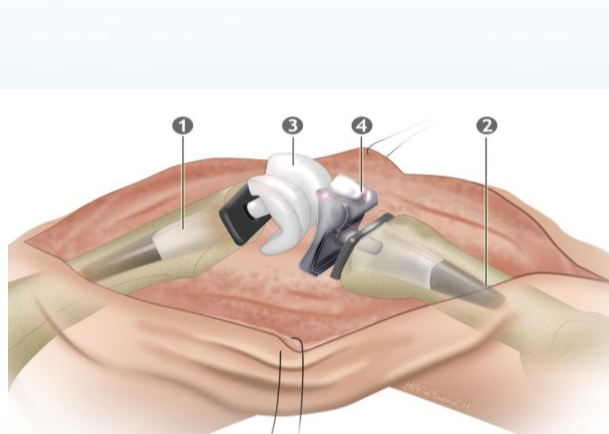
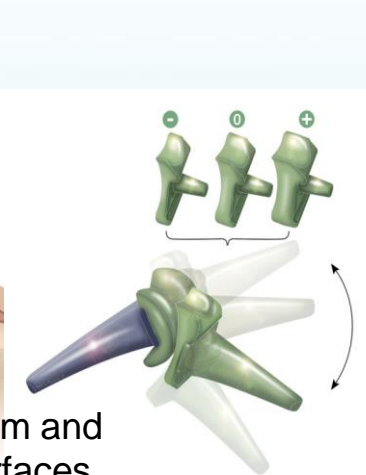
Distal phalanx preparation



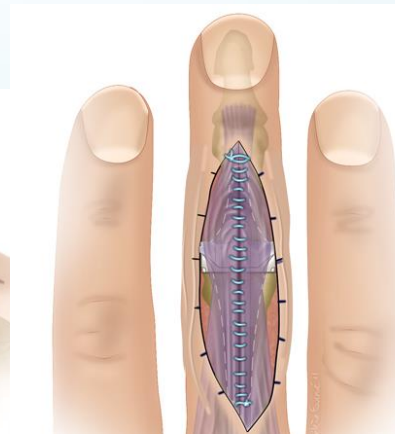
Palmar cortical removal



Trial stem and Trial surfaces



Fitting the final implants



Closure the extensor tendon

POST OP CARE

- Early active mobilisation
 - In an intrinsic-plus position splint
 - Strap with the adjacent finger



- Then physiotherapy and specific splinting if necessary

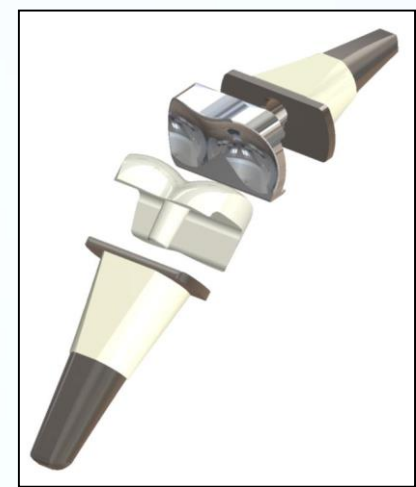


15 days post op



Nantes series

- 2 senior surgeons
- **22** cases: 17 Men, 5 Women
- Mean age: **64 years** (51-85)
- Etiology:
 - **OsteoArthritis= 18,**
 - **Posttraumatic Arthritis= 3,**
 - **Rheumatoid Arthritis= 1**
- Fingers: **III=9, IV=7, II=2, V=5**
- Follow-up: **34 months (24 to 50)**
- 1 reviewer: independant



Client Name: _____ Date: _____

QUICK DASH

Please rate your ability to do the following activities (circled areas) by putting the number below the appropriate evaluation.

	NO DIFFICULTY	SLIGHT DIFFICULTY	Moderate DIFFICULTY	SEVERE DIFFICULTY	IMPOSSIBLE
1. Open drawer or file jar	0	1	2	3	4
2. Sit down (circled area) stand up (not circled) stand up	0	1	2	3	4
3. Carry a shopping bag or briefcase	0	1	2	3	4
4. Walk your dog	0	1	2	3	4
5. Use a knife to cut food	0	1	2	3	4
6. Manipulate a valve or adjust the valve using force or torque through your arm, include turning a gas grill, loosening, screws, etc.	0	1	2	3	4

	NO AT ALL	SLIGHT	Moderate	SEVERE	IMPOSSIBLE
7. Using (circled area) or other means to open jars, drawers or lock and/or unlatch and/or lock doors (not circled) with keys, handle, magnet or pinset?	0	1	2	3	4

	NO DIFFICULTY AT ALL	SLIGHT	Moderate	SEVERE	IMPOSSIBLE
8. Doing (circled) work, when you started (not circled) work in other regular daily activities or unusual in your arm, shoulder or hand or wrist?	0	1	2	3	4

Please rate the severity of the following symptoms in the last week (circle number)

	None	SLIGHT	Moderate	SEVERE	IMPOSSIBLE
9. Any swelling on hand/wrist	0	1	2	3	4
10. Tingling (not numbness) in your arm, shoulder or hand	0	1	2	3	4

	NO DIFFICULTY	SLIGHT DIFFICULTY	Moderate DIFFICULTY	SEVERE DIFFICULTY	IMPOSSIBLE
11. Using (circled) work, how much difficulty have you had using (not circled) the previous year arm, shoulder or hand? (circle number)	0	1	2	3	4

© 1998 by the American Society of Hand Therapists. All rights reserved. This instrument is a trademark of the American Society of Hand Therapists. Reproduction of this instrument without the permission of the American Society of Hand Therapists is prohibited. This instrument is a trademark of the American Society of Hand Therapists.



Results

22 cases	PIP Rom °	Pain /10	PRHE / 100	Quick Dash /100	Grip kg.F	Pinch kg.F
Pre-op	39	6.5	51,53	52,15	21	3
33 m F.U	58	1.9	18,2	22,52	26	5



Clinodactily Ulnar	°
Pre op: 15 cases	9° (0° – 20°)
Post op: 2 cases	2° , 4°

Central slip attachment	PIP ROM°	Extension Lag°
Yes(8 cases)	69°	7,5°
No(14 cases)	53°	8,6°

Satisfaction

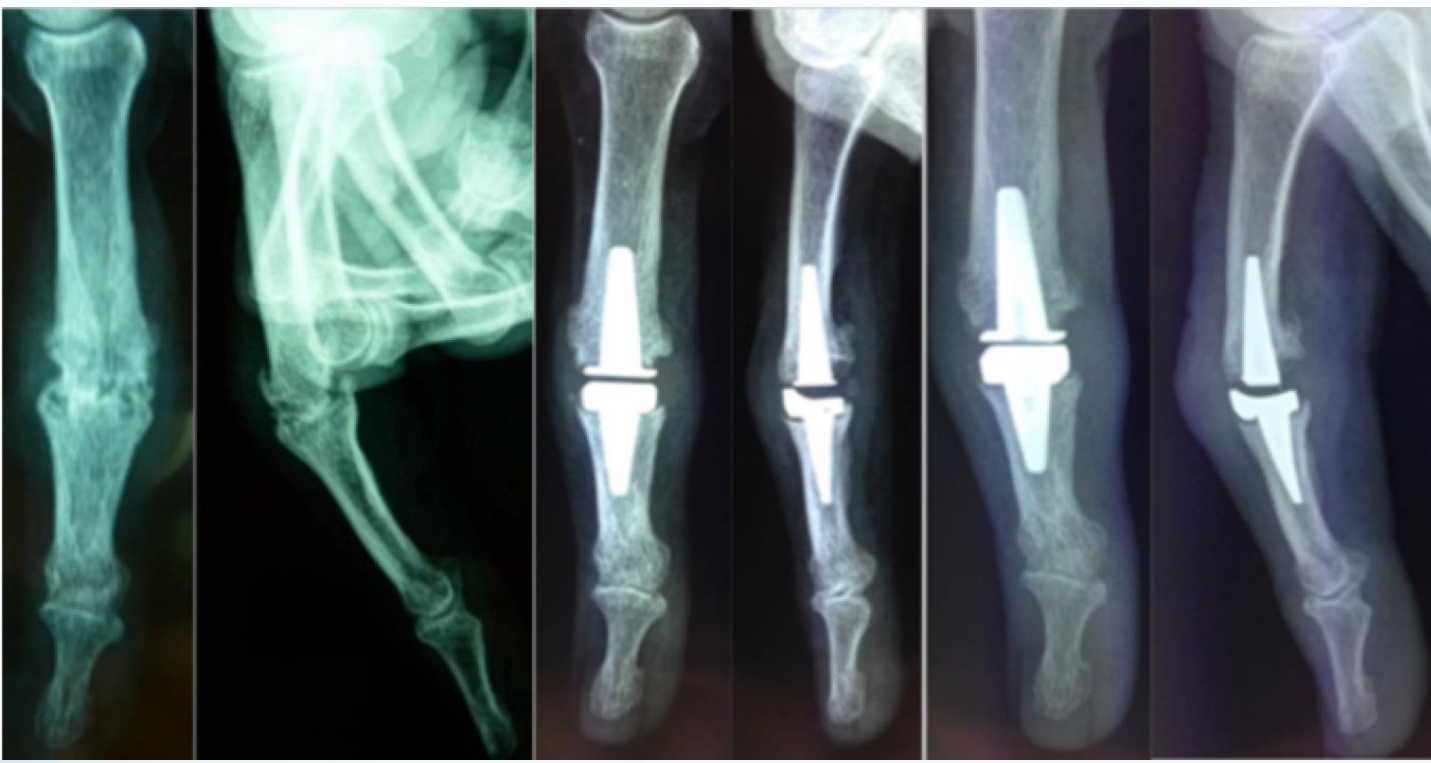
- Excellent = 8
- Good = 9
- Fair = 5

} **77%**

Mean post op extension lag : **8°** (0°- 20°)



Standard case



OsteoArthritis Middle

1 year post operative

3 years post operative

Complications

- Swan neck deformity : 4



- Stiffness (ankylosis) : 1
- Ossification : 7
- Lossening : 0
- Migration : 0
- Luxation: 0
- Infection : 0



Reoperations (4/22 = 18%)

- 3 dorsal tenoarthrolysis
 - 1 with a thinner base of distal articulating surface
- 1 removal of a palmar osteophyte

Discussion



Nantes PIP prosthesis	Silicon	Ascension	TACTYS
Nb	20	22	22
age	67	65	64
FU	39	30	33
Pain	2,7	3,2	1,9
ROM	47	50	58
PRHE	31,3	36,4	18,2
Reoperation	5%	23%	18%

SOFCOT 2012
GEM 2012
SOO 2013