

NAVIGATION-GUIDED DYNAMIC PLANNING IN DAA TOTAL HIP ARTHROPLASTY: FROM PREOPERATIVE TEMPLATING TO DEFINITIVE IMPLANT SELECTION

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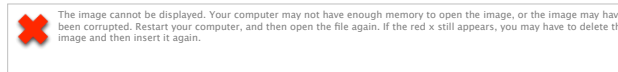


INTRODUCTION

The clinical Problem

Static pre-op implant templating does not fully predict final reconstruction: cup COR, leg length, offset.

Static template



Dynamic Planning



Goal-concordant
reconstruction

PURPOSE

Assess the relationship between static preoperative templating, intraoperative implant modifications, and achievement of patient-specific reconstructive goals using imageless navigation in DAA-THA.

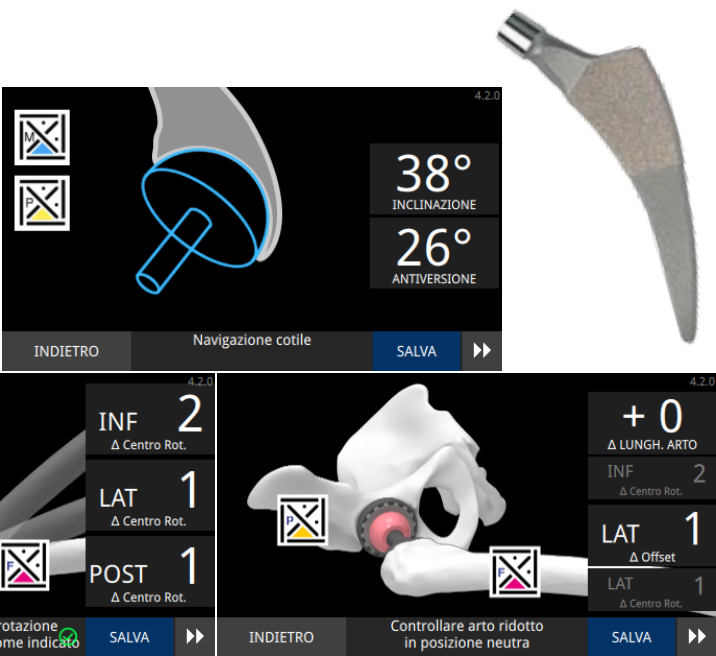


METHODS

Retrospective Cohort: n=75

Exclusion Criteria: Severe deformities; Revision THA; incomplete or missing data;

Total n=66	Zimmer Fitmore n=50	Zimmer Avenir Complete n=16
Age, years	62.6 ± 9.6	69.9 ± 10.9
Sex	28 M / 22 F	1 M / 15 F
Side	26 right / 24 left	10 right / 6 left
Tönnis	All grade 3	All grade 3
Dorr	A: 11(22.0%); B: 39 (78.0%)	B: 13 (81.3%); C: 3 (18.8%)
Surgery time	79.2 ± 15.4 min	72.9 ± 14.1 min
Blood loss	416 ± 55 ml	431 ± 125 ml



DEFINITIONS

Corrected Planning: Pre-operative goal expected not to aim for standard

Standard Planning: Final leg length (LL) and offset within neutrality.

Goal Concordance: Final result matched the pre-operative plan.



RESULTS

50/50

Success Standard Planning

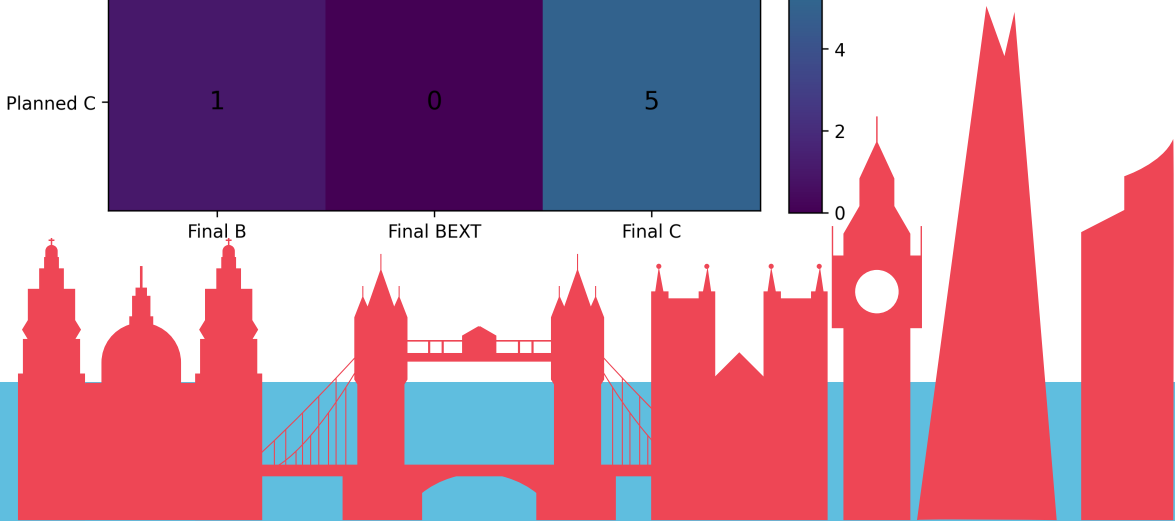
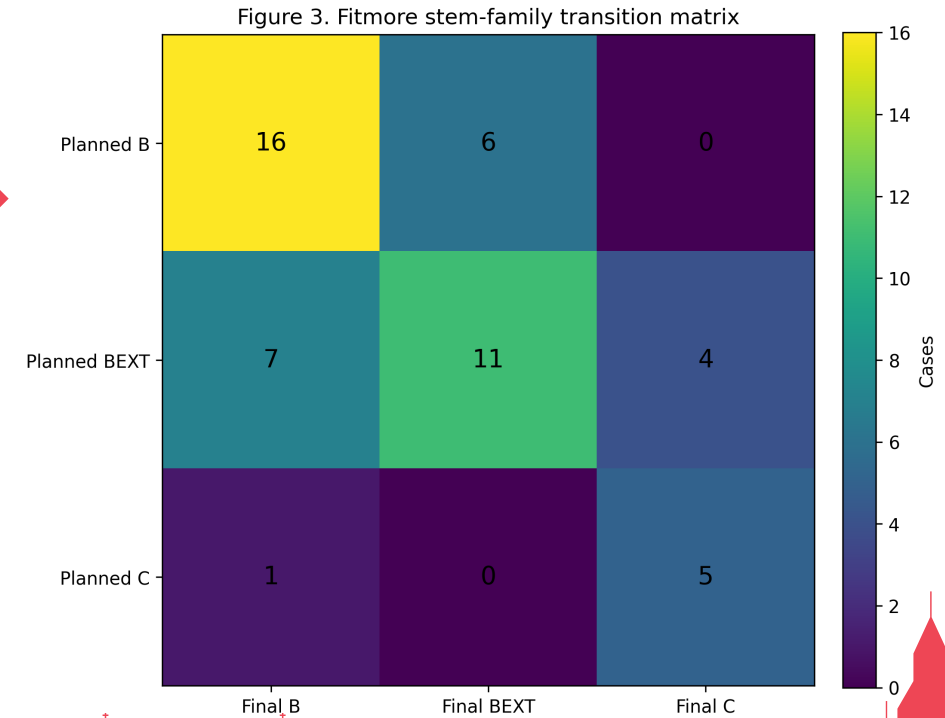
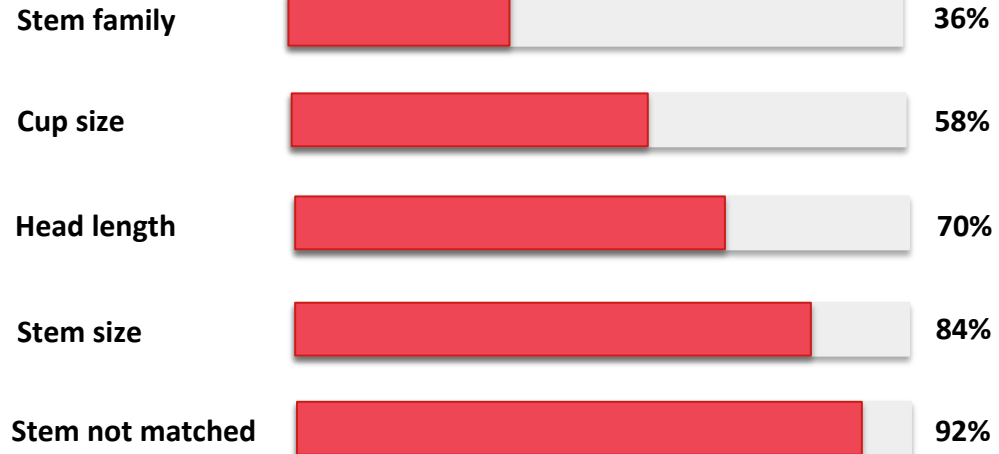
15/16

Success Corrected Planning

65/66

Targets achieved = 98.8%

Planning variable modified



CONCLUSION

👑 STEM FAMILY CHANGED IN 36% OF CASES

=

NEED OF DINAMIC INTRAOPERATIVE OFFSET-STRATEGY

👑 65/66 STANDARD AND CORRECTED PLANNING TARGETS ACHIEVED

= 98.8% PRECISION

👑 NAVISWISS ENABLED **DYNAMIC EXECUTION OF PATIENT-SPECIFIC PLANNING**



CONTACT DETAILS

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