

DEFINING PARAMETERS FOR SURGICAL CORRECTION AND OUTCOMES FOR FEMOROACETABULAR IMPINGEMENT THROUGH CONSENSUS (DEFINE) USING A MODIFIED DELPHI APPROACH

DEFINE Investigators Collaborating Group

MacORTHO

Corresponding Author:
Olufemi R. Ayeni, MD, PhD, FRCSC

*Investigation performed at McMaster University,
Hamilton, Ontario, Canada (Division of Orthopaedic
Surgery, Department of Surgery)

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Disclosures

- Dr. Olufemi R Ayeni declares that he has a non-financial conflict of interest as he is associated with the Speakers Bureau for Conmed and Stryker Canada. Dr. Ayeni holds a Tier 2 Canada Research Chair in Joint Preservation Surgery.

Introduction

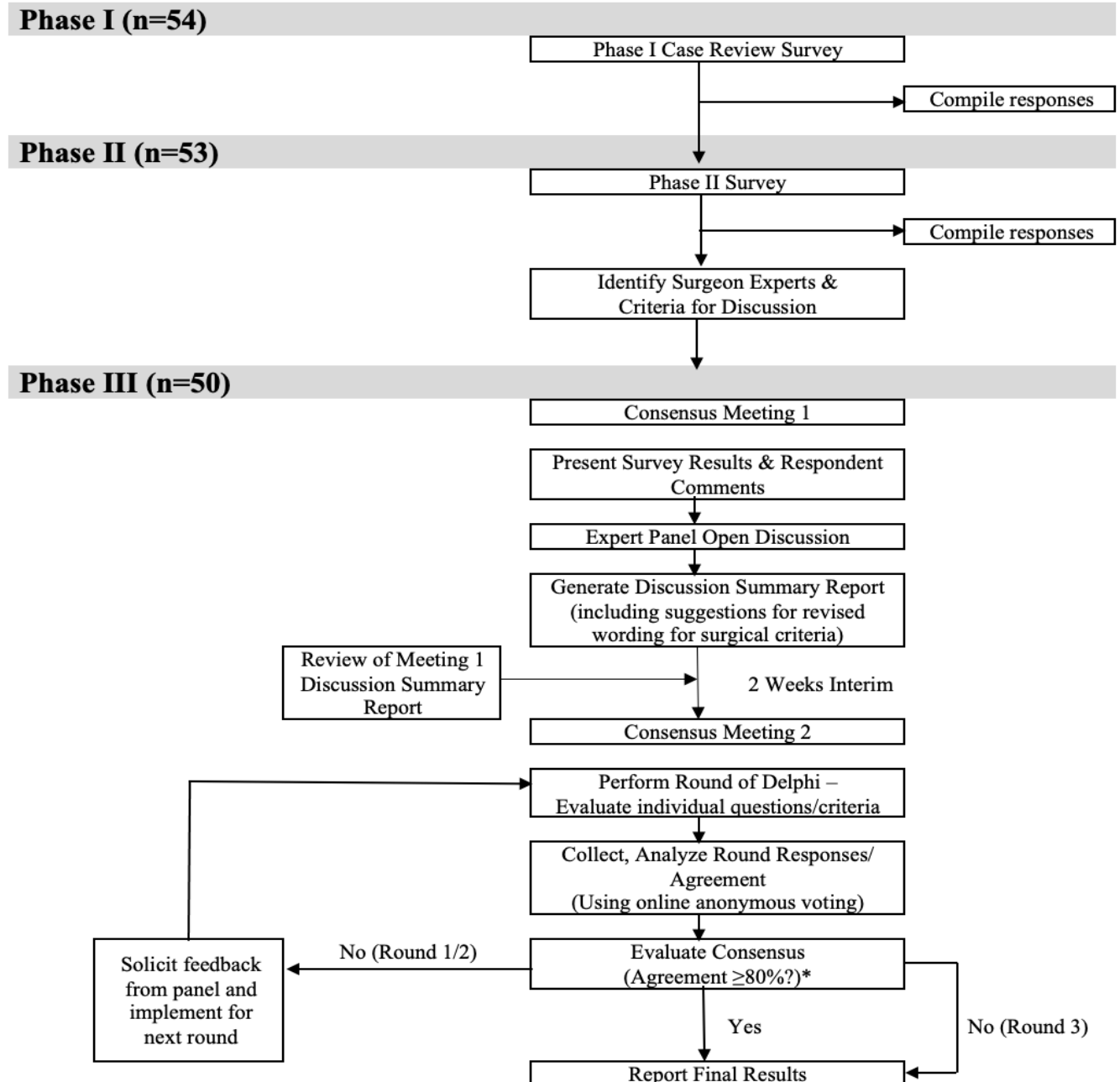
- During FIRST Trial, adjudication committee raised questions about applicability and validity of criteria for evaluating FAI correction.
 - Lack of consistency in including pre-/postoperative radiographic measurements and radiographic correction goals
 - Heterogeneity in attributing postoperative hip complications (such as instability, tendinopathy, osteoarthritis, and infection) to the index surgery.

Objectives

- Primary objective to determine whether it was possible to, and then develop standardized radiographic and clinical criteria for defining the “acceptable” surgical correction of FAI.
- Secondary objective was to identify and define complications post-FAI surgery.

Methods

- A 3-phase modified Delphi study was conducted involving a
 - Case-based survey;
 - a Likert/multiple choice-based survey concerning radiographic and physical examination characteristics to help define FAIS correction, as well as the prevalence and definition of potential postoperative complications;
 - 2 consensus meetings

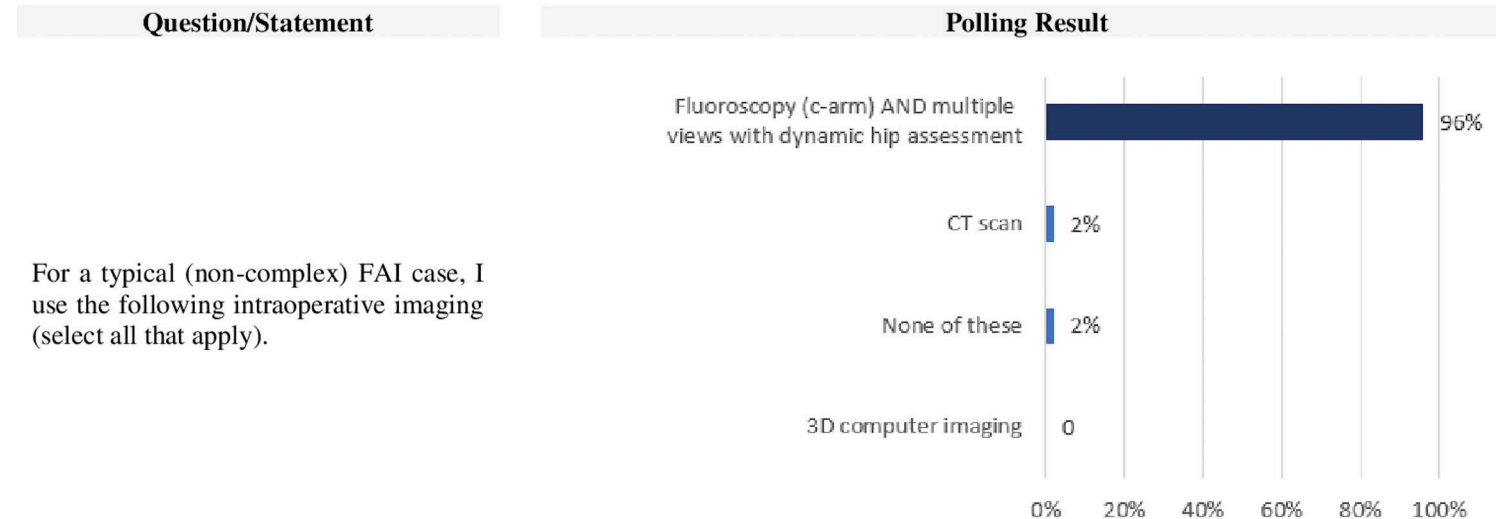


*Consensus was reached when 80% or more of the voting panel members provided a positive (5, 6, or 7), negative (1, 2, or 3), or neutral (4) result on the Likert-scale OR a multiple-choice (select one or select all that apply) question.

Results

- Post-Op Imaging
 - Dunn lateral and anterior posterior (AP) x-rays were the most important radiographs to evaluate the hip postoperatively (88% consensus)

Sample Polling Results



Results

- Cam Impingement
 - Correction based on subjective evaluation of the ‘sphericity’ of the femoral head (87% consensus)
- Focal and global pincer-type FAI
 - Correction aimed at reduction or elimination of the crossover sign

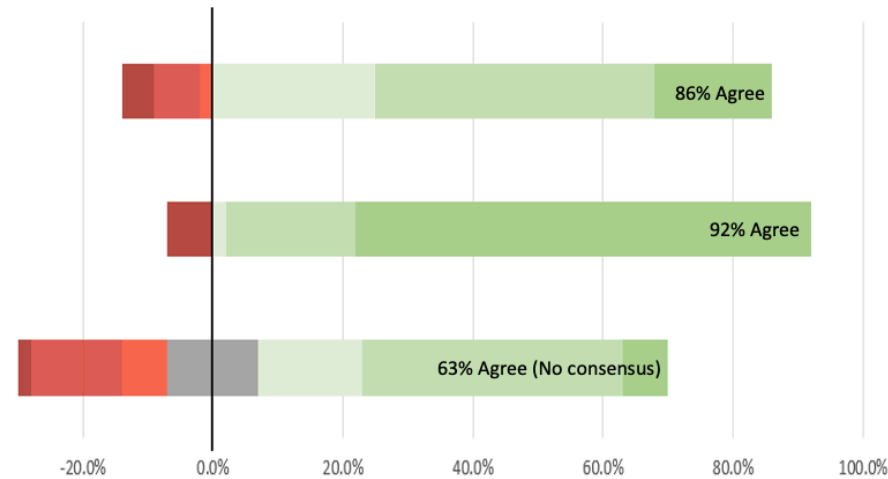
Sample Polling Results

How strongly do you agree or disagree with the following statements?

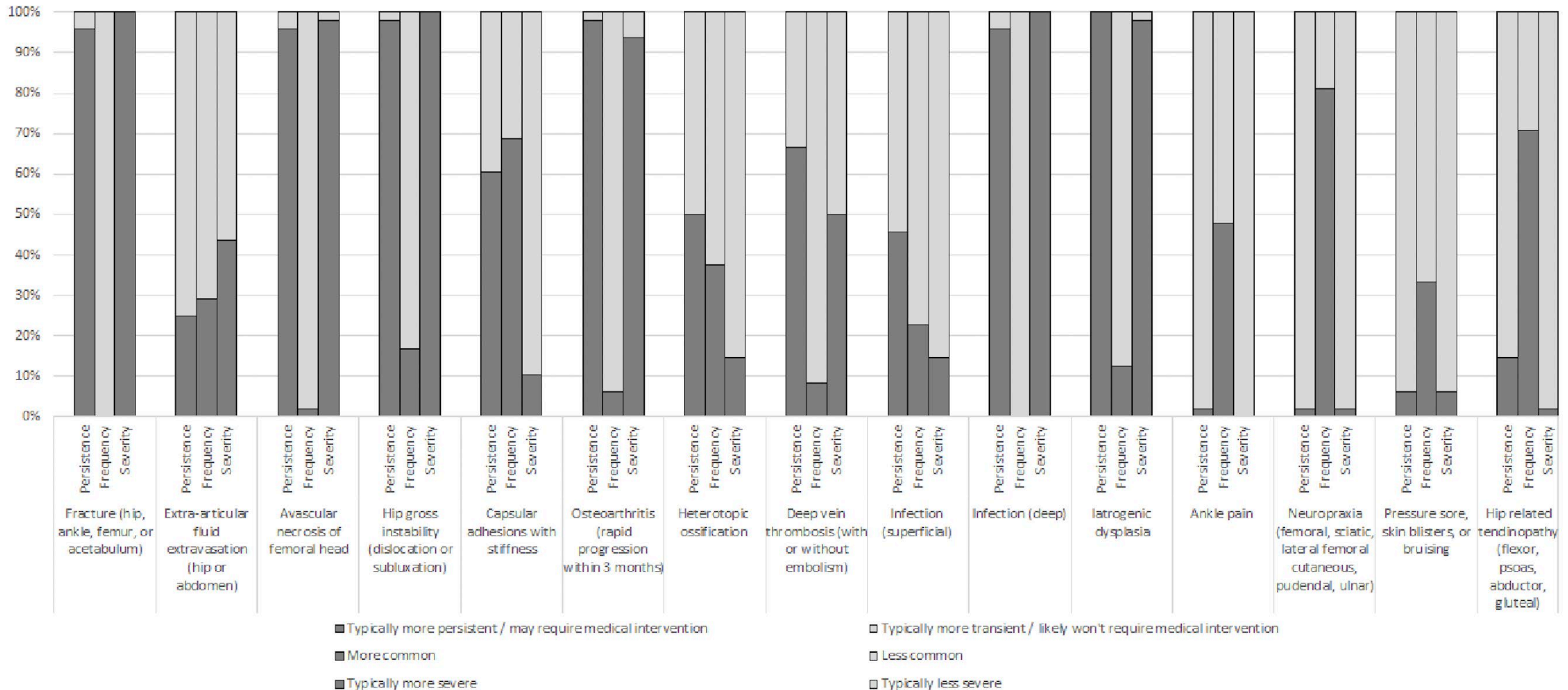
“PINCER-type FAI can be radiographically identified by several different criteria, and the goal is to make sure that those areas of abnormality are addressed intra-/postoperatively.”

In my opinion, over-correction of PINCER-type FAI is important to avoid as it can potentially lead to borderline dysplasia or iatrogenic instability.

I have in mind and can recommend an outer range/limit of one or more radiographic measurements to surgeons to help them avoid over-resection of PINCER-type impingement.



Results - Frequency of Complications



Conclusion

- **Intraoperative assessment**
 - Recommend fluoroscopy and dynamic hip assessment intraoperatively
- **Timelines**
 - Identifying postoperative complications and indications for postoperative assessments using agreed upon timelines of 6 months (at a minimum) was recommended
- **Surgical correction goal**
 - Dunn lateral and AP view radiographs postoperatively
 - Evaluating the 'sphericity' of the femoral head for cam-type correction
 - Use of dynamic hip assessment both intra- and postoperatively
 - Reducing/eliminating the crossover sign for focal pincer-type FAI
 - Evaluating the LCEA for global pincer-type FAI
 - Avoiding over-correction of pincer-type FAI

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