Why look to the future?

Why look to the future? We look to the future to challenge the existing state of affairs. The practice of medicine is fluid, and thus, what we practice today will surely be different than what we practice tomorrow. The ability to synthesize, disseminate, implement and monitor emerging evidence is critical to ensure medicine moves forward while upholding best practices and patient-centred care. This notion is particularly important for hip arthroscopy, which is a relatively young field with several remaining core knowledge gaps.

Initially, hip arthroscopy was mainly diagnostic, but better understanding of the pathology, improved examination techniques and imaging modalities have led to an increasing proportion of therapeutic procedures coupled with the recognition of new pathologies. This expanding list of hip conditions includes symptomatic labral tears, chondral lesions, femoroacetabular impingement (FAI), injuries of the ligamentum teres, instability, and various extra-articular hip disorders. While there has been a substantial increase in both arthroscopic hip procedures and research throughout the world (1,2), there remains a paucity of evidence to support the indications and benefits of surgical versus non-surgical management of FAI. However, several multi-center randomized trials currently underway may provide some insights: trial of arthroscopic surgery for hip impingement versus best conventional care (UK FASHION), the FemoroAcetabular Impingement Trial (FAIT) and the Femoroacetabular Impingement RandomiSed Controlled Trial (FIRST) (3-5). While some non-arthritic hip surgery registries exist (British Non-Arthroplasty Hip Registry and the Danish Hip Arthroscopy Register), more are needed, as their contribution to epidemiological research and monitoring of long-term clinical outcomes will prove invaluable.

Prophylactic hip arthroscopy to correct hip impingement is currently not recommended. The progression from asymptomatic FAI on incidental radiographs to FAI syndrome (FAIS), and finally osteoarthritis remains incompletely understood and longitudinal studies are needed to establish risk factors of disease progression (6). While various cut-offs used to define cam and pincer-type impingement have been proposed, it is plausible that the true threshold for FAIS "expression" is largely influenced by a combination of morphological parameters, genetics, and cultural habits and activities. The role of quantitative and biological chondral imaging modalities needs further investigation, in particular whether early detection and changes post-operatively correlate with better functional outcomes and long-term progression. Biologic therapies have emerged as a new or adjunctive modality to improve clinical outcomes of hip pathology, as well as, innovative techniques to repair chondral damage and restore the form and function of the labrum. Lastly, while the future of hip arthroscopy is bright, the learning curve is prolonged, and therefore valid and reliable teaching and assessment tools will be essential to prepare young surgeons to effectively apply the emerging evidence of tomorrow.

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