

Freely available online OPEN acc



INFOGRAPHIC

# Infographic: The history of femoroacetabular impingement

Cite this article: Bone Joint Res 2020;9(9):633-634.

### K. Matsumoto, R. Ganz, V. Khanduja

Keywords: History, Femoroacetabular impingement

From Young Adult Hip Service, Department of Trauma and Orthopaedic Surgery, Addenbrooke's Hospital, Cambridge, UK

The term femoroacetabular impingement (FAI) was coined in 1999 by the Ganz group from Switzerland,<sup>1</sup> but what is often overlooked is that descriptions of the morphology have existed in the literature for centuries. We completed a non-systematic review of the literature to uncover the origins of FAI, also published in this issue of *Bone & Joint Research.*<sup>2</sup>

FAI has seemingly existed for over 5,000 years,<sup>3</sup> but the anatomical study by Henle in 1855<sup>4</sup> was the first to describe it in the literature. Since then, key anatomical, radiological, and surgical discoveries have been made. Ganz et al<sup>5</sup> then organized these seemingly disparate past findings while adding their own experience from open surgical dislocations of the hip to describe FAI in its entirety, from mechanism to treatment. This has served as the foundation to our knowledge on FAI. Since then, there has been an exponential rise in the literature regarding FAI. This infographic summarizes the important phases in the history of FAI.

# Twitter

@CambridgeHipDoc

## References

- Myers SR, Eijer H, Ganz R. Anterior femoroacetabular impingement after periacetabular osteotomy. *Clin Orthop Relat Res.* 1999;363:93–99.
- Matsumoto K, Ganz R, Khanduja V. The history of femoroacetabular impingement. *Bone*. 2020;9(9):572–577.
- Zurmühle CA, Milella M, Steppacher SD, Hanke MS, Albers CE, Tannast M. ArtiFacts: Femoroacetabular Impingement-A New Pathology? *Clin Orthop Relat Res.* 2017;475(4):973–980.

- 4. Henle J. Handbuch Der systematischen Anatomie des Menschen. Braunschweig: Knochenlehre, 1855:254.
- Ganz R, Parvizi J, Beck M, Leunig M, Nötzli H, Siebenrock KA. Femoroacetabular impingement: a cause for osteoarthritis of the hip. *Clin Orthop Relat Res.* 2003;417:112–120.

#### Author information:

- K. Matsumoto, BA (Cantab), Medical Student, Cambridge University School of Clinical Medicine, Addenbrooke's Hospital, Cambridge, UK.
- R. Ganz, MD, MD (Hon), FRCS Ed (Hon), Professor of Orthopaedic Surgery, Faculty of Medicine, University of Bern, Bern, Switzerland.
- V. Khanduja, MA (Cantab), MSc, FRCS (Tr & Orth), Consultant Orthopaedic Surgeon & Clinical Lead of Young Adult Hip Service, Young Adult Hip Service, Department of Trauma and Orthopaedic Surgery, Addenbrooke's Hospital, Cambridge, UK.

#### Author contributions:

- K Matsumoto: Carried out the primary research, Wrote the manuscript.
- R Ganz: Provided the historical perspective, Edited the manuscript.
- V Khanduja: Conceptualized and supervised the study, Provided the initial papers on history, Liaised with the original author for historical detail, Edited and assumed overall responsibility for the manuscript.

#### Funding statement:

The author or one or more of the authors have received or will receive benefits for personal or professional use from a commercial party related directly or indirectly to the subject of this article.

#### ICMJE COI statement

R. Ganz reports seed money for Examedical S.p.A Italy, unrelated to this article. V. Khanduja reports personal educational consultancy payments, and payments for lectures including service on speakers bureaus, from Smith & Nephew and Arthrex, unrelated to this article. V. Khanduja also reports an associate editor position on *The Bone and Joint Journal*.

Acknowledgements None declared.

#### Ethical review statement

None declared.

© 2020 Author(s) et al. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial No Derivatives (CC BY-NC-ND 4.0) licence, which permits the copying and redistribution of the work only, and provided the original author and source are credited. See https://creativecommons.org/ license/by-nc-nd/4.0/.

Correspondence should be sent to Mr Vikas Khanduja; email: vk279@cam.ac.uk

doi: 10.1302/2046-3758.99.BJR-2020-0383

Bone Joint Res 2020;9(9):633–634.

