UPDATE IN UROLOGY

BASIC RESEARCH IN UROLOGY

Vol. 47 (6): 1266-1267, November - December, 2021
doi: 10.1590/S1677-5538.IBJU.2021.06.03

Editorial Comment: Image-guided study of swine anatomy as a tool for urologic surgery research and training

Jacob Hindrik Antunes Smit [1], Eduardo Piotto Leonardi [2], Rosa Helena de Figueiredo Chaves [3], Ismari Perini Furlaneto [3], Cezar Massoud Salame da Silva [4], et al.

[1] Graduate student, School of Medicine, Centro Universitário do Estado do Pará, Belém-PA, Brazil; [2] MSc, Associate Professor, Department of Urology, School of Medicine, Centro Universitário do Estado do Pará, Belém-PA, Brazil; [3] PhD, Grupo de Pesquisa Experimental, Centro Universitário do Estado do Pará, Belém-PA, Brazil; [4] MSc, Associate Professor, Department of Radiology, School of Medicine, Centro Universitário do Estado do Pará, Belém-PA, Brazil

Acta Cir Bras. 2021 Jan 20;35(12):e351208

DOI: 10.1590/ACB351208 | ACCESS: 10.1590/ACB351208

Luciano A. Favorito [1]

[1] Unidade de Pesquisa Urogenital - Universidade do Estado do Rio de Janeiro - Uerj, Rio de Janeiro, RJ, Brasil

COMMENT

In this interesting paper the authors shows the importance of the animal models for urological training. Basic research is very important to to provide the basis for training young urologists using human or animal models (1, 2). The use of pigs and dogs to show the anatomical aspects of urological structures is very well established in the literature (3, 4). In this paper the authors describe the anatomy of the swine urinary system using computed tomography and to discuss the role of this animal as an experimental model for urological procedures and concluded that the data obtained show similarities with human anatomy, suggesting the viability of the swine model for planning preclinical trials, basic research, refinement in experimental surgery and surgical training for urological procedures.

CONFLICT OF INTEREST

None declared.

REFERENCES

1. Sampaio FJ, Favorito LA, Freitas MA, Damião R, Gouveia E. Arterial supply of the human fetal testis during its migration. J Urol. 1999;161:1603-5.
2. Sobrinho ULGP, Albero JRP, Becalli MLP, Sampaio FJB, Favorito LA. Three-dimensional printing models of horseshoe kidney and duplicated pelvicalyceal collecting system for flexible ureteroscopy training: a pilot study. Int Braz J Urol. 2021;47:887-89.
3. Marques-Sampaio BP, Pereira-Sampaio MA, Henry RW, Favorito LA, Sampaio FJ. Dog kidney: anatomical relationships between intrarenal arteries and kidney collecting system. Anat Rec (Hoboken). 2007;290:1017-22.
4. Pereira-Sampaio M, Favorito LA, Henry R, Sampaio FJ. Proportional analysis of pig kidney arterial segments: differences from the human kidney. J Endourol. 2007;21:784-8.

Luciano A. Favorito, MD, PhD

Unidade de Pesquisa Urogenital
da Universidade do Estado de Rio de Janeiro - UERJ,
Rio de Janeiro, RJ, Brasil
E-mail: lufavorito@yahoo.com.br

ARTICLE INFO

Luciano A. Favorito
http://orcid.org/0000-0003-1562-6068

Int Braz J Urol. 2021; 47: 1266-7