



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

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COMMENT

In this interesting paper the authors shows the importance of the animal models for urological training. Basic research is very important 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, Alberio 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.

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