



# Fluoroscopy during coccygectomy for rectal cancer

P. M. Foye<sup>1</sup> · G. J. S. Sidhu<sup>2</sup> · M. R. Araujo<sup>3</sup>

Received: 2 July 2020 / Accepted: 12 July 2020 / Published online: 20 July 2020  
© Springer Nature Switzerland AG 2020

Dear Sir,

We read with great interest the excellent article by Simpson et al. entitled, “Sacrococcygeal Dimensions and Curvature Are Associated With Resection Quality in Rectal Cancer Excision” published in *Techniques in Coloproctology* [1].

We were impressed by the diligence with which the researchers used preoperative and postoperative imaging studies to demonstrate “the challenges facing the surgeon... in adequately identifying the extent of the coccyx to guide coccygectomy.” They noted that intended coccygectomy “was often incomplete with a significant proportion of coccyx remaining in most cases.” Indeed, they reported average coccygeal lengths of 41 mm preoperatively versus 33 mm postoperatively, showing that an average of 80% of the coccyx was left in place.

At our University-based Coccyx Pain Center, we often see coccydynia patients in whom prior attempts at complete coccygectomy inadvertently resulted in only partial, incomplete coccygectomy (often with residual tailbone pain) [2, 3].

We humbly suggest that surgeons should consider intraoperative fluoroscopy to aid them in assessing the completeness of the coccygectomy during these surgeries. We would greatly appreciate hearing from Simpson and colleagues regarding this option.

---

✉ P. M. Foye  
Doctor.Foye@gmail.com; Patrick.Foye@rutgers.edu

G. J. S. Sidhu  
g.jussasidhu@gmail.com

M. R. Araujo  
marielleraraujo@gmail.com

<sup>1</sup> Physical Medicine and Rehabilitation, Coccyx Pain Center, Rutgers New Jersey Medical School, 90 Bergen St, D.O.C. Suite 3100, Newark, NJ 07103-2425, USA

<sup>2</sup> Rutgers New Jersey Medical School, 90 Bergen St, D.O.C. Suite 3100, Newark, NJ 07103-2425, USA

<sup>3</sup> Department of Physical Medicine and Rehabilitation, Rutgers New Jersey Medical School, 90 Bergen St, D.O.C. Suite 3100, Newark, NJ 07103-2425, USA

**Funding** None.

## Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interest.

**Ethical approval** This article does not contain any studies with human participants or animals performed by any of the authors.

**Informed consent** For this type of article formal consent is not required.

## References

1. Simpson G, Marks T, Blacker S, Smith D, Walsh C (2020) Sacrococcygeal dimensions and curvature are associated with resection quality in rectal cancer excision. *Tech Coloproctol*. <https://doi.org/10.1007/s10151-020-02273-y>
2. Foye PM, Smith JA, Sanderson SO (2009) Cookie-bite coccyx: retained coccygeal fragment after coccygectomy. *Am J Phys Med Rehabil* 88(3):S56
3. Foye PM (2015). Coccygectomy: surgical removal of the tailbone. In: Foye PM (ed) Chapter 25: Tailbone pain relief now! Causes and treatments for your sore or injured coccyx. Top Quality Publishing, United States, pp 195–200 (ISBN-13: 978-0996453509)

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.