

with UPJO patients presenting with pain. In our population, incidental presentation was a common atypical UPJO presentation and may be associated with lower success rates after RAP. These findings will help reconstructive urologists counsel UPJO patients regarding outcomes after RAP, particularly those patients presenting with atypical UPJO.

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## SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found, in the online version, at <https://doi.org/10.1016/j.urology.2018.10.046>.

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## EDITORIAL COMMENT

Proper patient selection and meticulous suturing were the keys to success in my experience with pyeloplasty. The attraction of the present publication is the presentation of both aspects. Are there good reasons to treat uretero pelvic obstruction different from what is proposed by the authors?

I never believed in endopyelotomy which followed the principle of intubated ureterotomy and offered an unsatisfying, non-physiological view already at the end of the procedure.

In 2006 Dimarco et al.<sup>1</sup> reviewed their 20 years' experience with open pyeloplasty and endopyelotomy: the 3- and 10-year recurrence-free rates for endopyelotomy were 23 % and 34 % lower than those for open pyeloplasty. They concluded: "In view of these results of endopyelotomy, laparoscopic pyeloplasty may prove to be the preferred minimally invasive approach to repair ureteropelvic junction (UPJ) obstruction." These views were further confirmed in 2009 in a literature review<sup>2</sup> 7 years after the publication of the first robot assisted pyeloplasty:<sup>3</sup> "robot-assisted pyeloplasty seems to be emerging as the new standard of care in the patients with ureteropelvic junction obstruction." Finally, recently the still very popular use of endopyelotomy in the US has been questioned in view of the high failure rate: "Future research should examine to what extent patients and physicians are driving the use of endopyelotomy." and "... minimally invasive pyeloplasty, this approach may supplant open pyeloplasty as the "gold standard in the near future."<sup>4</sup> Another puzzling aspect is that in the US correction of UPJ obstruction in children by endopyelotomy (1.4%)<sup>5</sup> has never been as popular as in adults (41%).<sup>4</sup> The proper size equipment is available. Do pediatric surgeons and urologist think different than those treating adults?

The present paper helps to address these questions and critical points and to guide the reader to a responsible handling of patients.

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## AUTHOR REPLY



We appreciate the editor's commentary in placing our study within the larger context of management of this disease process. In particular, we agree that issues when comparing endopyelotomy with pyeloplasty warrant further discussion.

We were motivated to perform this research due to the growing number of consultations for incidentally discovered UPJ obstructions. Our goal was to assess how these patients fared symptomatically and radiographically after pyeloplasty. We found that patients with incidental UPJ obstruction had worse symptomatic and radiographic outcomes compared with those presenting with pain. We agree with the editor's comment that patient selection is therefore critical to success in this operation.

Several anatomic features have been associated with poor outcomes from endopyelotomy, that is impaired renal function, large renal pelvis and presence of a crossing vessel. It is these findings that make the patient an ideal candidate for dismembered pyeloplasty. While endopyelotomy has been reported to have high success rates in select patients, as a tertiary referral center, we see few patients who are candidates for this procedure. In our series, 8 of 105 patients (7.6%) underwent endopyelotomy at an outside institution prior to being referred for pyeloplasty at our institution. Interestingly, all 8 of these patients were in the group who presented with pain as the primary complaint. Of 105 patients in our series, only 3 required endopyelotomy postoperatively for persistent obstruction. Further research will help us better understand this dynamic disease process in both adult and pediatric populations.

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