

# The gold standard for the treatment of uncomplicated adult ureteropelvic junction obstruction

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The members of the highly experienced laparoscopy group from McMaster have demonstrated that their excellent results with laparoscopic pyeloplasty continue to be maintained with longer follow-up and greater numbers.<sup>1</sup> Since Kavoussi's group demonstrated laparoscopic pyeloplasty results in 100 patients to be equivalent to open pyeloplasty success,<sup>2</sup> several experienced laparoscopic groups have also shown success rates of over 90% with minimal narcotic requirements, convalescent times and morbidity, compared with open pyeloplasty procedures.<sup>3-5</sup> In contrast to the disappointing long-term results of endopyelotomy,<sup>6</sup> the success of the Anderson-Hynes laparoscopic pyeloplasty remains robust,<sup>7,8</sup> and there is no theoretic reason to believe that long-term results should be inferior to those of open pyeloplasty.

Some experts have suggested that laparoscopic pyeloplasty is "evolving" to become the gold standard in the repair of symptomatic ureteropelvic junction obstruction (UPJO) in adults. Laparoscopic pyeloplasty has reproducibly excellent short- and long-term results and minimal morbidity, compared with open pyeloplasty, and it can be argued that laparoscopic pyeloplasty should indeed be the current gold standard for the treatment of uncomplicated adult UPJO. However, it is considered a moderately to highly complex laparoscopic procedure<sup>9</sup> and cannot be offered in most community-based urologic centres, which evaluate a low volume of patients with UPJO. Fortunately, there are experienced laparoscopic surgeons at each Canadian academic centre who can offer laparoscopic pyeloplasty. If surgeons adhere to the basic principles of UPJO repair, there is no reason to believe that success rates of the Anderson-Hynes laparoscopic pyeloplasty should be inferior to those of open repair. The volume of laparoscopic pyeloplasty at these centres should reflect operative times and complication rates. In the case of the highly experienced McMaster group, acceptable complication rates and operative times of just over 3 hours have been demonstrated.

In Canada, several centres have acquired or are in the process of acquiring surgical robots. These robots have been shown to improve surgical ergonomics and efficacy when compared with laparoscopy.<sup>10</sup> In fact, it has been demonstrated that the surgical robot is capable of flattening the learning curve and allowing laparoscopically naive surgeons to embark on "advanced" laparoscopic procedures that could not otherwise have been achieved without robotics.<sup>11-13</sup> Although the most experienced surgeons have shown that robotics have not improved operative times and results, owing to docking and instrument exchange times,<sup>14</sup> there are several studies from centres with

less experience that have shown equivalent surgical results and significant reduction of surgical times with the use of the robot.<sup>15</sup> Our centre's long-term results in 55 patients and our surgical times of under 3 hours support this claim.<sup>16,17</sup> In summary, if patients have access to experienced laparoscopic surgeons or moderately experienced surgeons with advanced (albeit expensive) technology, I believe that the laparoscopic pyeloplasty should be offered as the current gold standard for the repair of uncomplicated adult UPJO.

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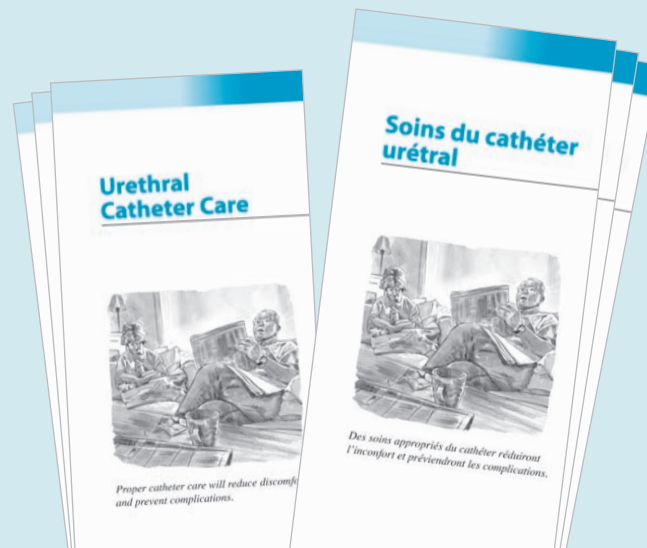
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