# Authors' reply

*To the Editor*—We would like to thank Dr Ng for his comprehensive comments. In the era of minimal invasive surgery, the outcomes we consider are not only safety, but also quality, which is often defined by pain and cosmetic result. Scarless surgery is the ultimate goal for both surgeons and patients. Though patient satisfaction results were not assessed in this prospective study, there is some evidence in the literature of patient preference for two-port techniques. A previous report on two-port laparoscopic cholecystectomy (LC) has already shown that all patients would choose two-port over four-port approach.[1] In our previous randomised trial of two-port versus four-port LC, the two-port group had a higher mean satisfaction score in regard to their scar, though the difference did not reach the level of significance.[2] Needlescopic surgery is another important achievement in pursuit of superior cosmetic outcome.[3] The price to be paid is the fragile, expensive instruments, and more demanding surgical technique. Our two-port needlescopic technique, using a 3-mm needlescopic instruments, reaches the maximal degree of a minimally invasive approach without compromising safety. There is certainly a learning curve in the mastery of the new technique; nevertheless, surgical residents under supervision can perform two-port LC well.[2]

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# More on phaeochromocytoma

*To the Editor*—Ku et al[1] are to be congratulated on managing their case of phaeochromocytoma extending into the right atrium with such finesse after careful surgical planning. Their report also highlights the importance of a multidisciplinary team approach to achieving such excellent results and minimal morbidity. However, this patient presents as great a challenge to the anaesthetic team as to our surgical colleagues, and there was a paucity of discussion in the report of any special anaesthetic management in this patient, in particular of intra-operative haemodynamic control. Such discussion could help share the latest information on the perioperative management of this rare disease, ie doxazosin instead of phenoxybenzamine for preoperative alpha-blockade,[2] or nifedipine infusion for intra-operative blood pressure (BP) control.[3] I was particularly impressed with the statement, "The blood pressure remained stable without any episode of hypertensive crisis." I would be eager to know if this applied to the whole period of surgery. My limited experience of six cases of phaeochromocytoma over the past few years (including two undiagnosed cases) has shown that, despite preoperative alpha- and beta-blockade, wide BP swings were inevitable and tumour manipulation required extra hypotensive therapy. Perhaps the preoperative stabilisation in my patients has been inadequate.

I wish to share my experience of anaesthetising a patient with an undiagnosed intracardiac phaeochromocytoma a few years ago. This 41-year-old male patient presented with headache, sweating, chest pain, hypertension, and palpitations; and had been investigated in Macau and China. Both echocardiography and magnetic resonance imaging revealed a large right atrial mass but no intra-abdominal mass. Cardiac catheterization showed a 95% narrowed left anterior descending branch which was stented. Medical treatment included atenolol, perindopril,

aspirin, and frusemide. The patient returned to Hong Kong for surgical removal of "atrial myxoma" in one of the private hospitals. During operation, routine cardiac monitors included electrocardiography, intra-arterial cannula, and multilumen central venous catheter. After induction of anaesthesia (high-dose fentanyl, midazolam, thiopentone, and pancuronium), the systolic BP shot up from 145 to 220 mm Hg, while the heart rate increased from 100 to 120 beats per minute (bpm). This was controlled with boluses of propofol. The surgeon proceeded with sternotomy and aortic cannulation after systemic heparinisation. During right atrial manipulation, the BP again rose above 250 mm Hg requiring nitroprusside, propranolol, and phentolamine, which lowered the BP to the 130 mm Hg range. The possibility of a catecholamine-secreting tumour was contemplated. Nevertheless, after right atrial cannulation the patient was quickly put on cardiopulmonary bypass. The perfusion pressure was maintained at about 60 mm Hg without further vasodilator therapy. Right atriotomy showed no tumour. However, a whitish tumour mass measuring 3 cm x 4 cm was found adherent to the exterior right atrial surface and was resected. The atrial wall remained intact, and the patient was taken off bypass smoothly with minimal dopamine. The postoperative BP was 110 to 120 mm Hg with a junctional rhythm of 50 to 60 bpm. Pathological diagnosis was paraganglioma. The normalisation of BP after atrial cannulation was thought to be due to isolation of the tumour from systemic circulation.

There have only been anecdotal reports of cardiac phaeochromocytoma,[4,5] and my patient might be the first in Hong Kong.

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# Improvement of adenoidectomy for childhood snoring

We read with interest the report "Endoscopic-guided adenoidectomy using a classic adenoid curette: a simple way to improve adenoidectomy" by Wan et al.[1] We agree with the authors that endoscopic-guided adenoidectomy is an improvement over traditional adenoidectomy. However, the indication for adenoidectomy is not clear from the study. The suspected obstructive sleep apnoea (OSA) cases in their series remained suspected, as they were not confirmed by overnight polysomnography. This is highly unsatisfactory as the visual analogue scale used in their study is not a validated tool for screening childhood OSA. The OSA-18 questionnaire (Table) is a better tool to assess the impact of sleep-disordered breathing.[2] Children who undergo adenotonsillectomy should be closely monitored as the rate of postoperative complications in severe OSA patients has been reported as high as 25%.[3] It is not clear from Wan et al's series what kind of postoperative monitoring was implemented to justify the statement: "All of the patients did not have any postoperative complications".

Further, in order to identify the site(s) of obstruction, we suggest that polysomnographically confirmed OSA patients undergo flexible endoscopic assessment of the upper airway during spontaneous breathing while in an induced sleep state. This approach was shown by Guilleminault et al[4] to improve the overall long-term treatment effect. The importance of sleep endoscopy was best illustrated by case 2 in Wan et al's series, as the enlarged adenoid was missed by the first palpating surgeon.

In Wan et al's series, four children had only adenoidectomy without tonsillectomy. The reason for this omission is not clear from the report. The impact of the tonsils on the airway is likely to be