Perception of preference and risk-taking in laparoscopy, transgastric, and rigid-hybrid transvaginal NOTES for cholecystectomy

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QUESTIONS UNDER STUDY
Few data are available regarding patients' perceptions of new cholecystectomy (CC) techniques, in the context of the patients' risk behaviours. We investigated patients' preferences for transgastric pure natural orifice transluminal endoscopic surgery (NOTES; transgastric NCC) and rigid-hybrid transvaginal NOTES CC (tvNCC) compared with the standard laparoscopic CC (SL-CC), and patients' risk behaviours.

METHODS
A total of 140 inpatients scheduled for elective laparoscopic CC were enrolled in this prospective single-centre study, from January 2009 to January 2010. Patients judged the potential advantages and disadvantages of transgastric NCC and tvNCC compared with SL-CC. The individual's risk behaviour was analysed by means of the validated 40-item Domain-Specific Risk Attitude Scale (DOSPERT).

RESULTS
Of the 140 recruited patients, 57 (65% females; mean age 51.5 years) were analysed. Twenty-five percent of males opted for transgastric NCC and 75% opted for SL-CC. Among females, 10.8%, 37.8% and 51.4% opted for transgastric NCC, tvNCC and SL-CC, respectively. Faster convalescence was graded as the primary potential advantage of transgastric NCC, whereas the potential risk of long-term stomach injuries was considered a primary disadvantage. Females graded the reduction of hospital-acquired morbidity as the primary advantage of tvNCC. The risk assessment showed significantly more risk-taking behaviour in the recreational domain of life among patients who opted for innovative surgical techniques than among those opting for conventional surgery.

CONCLUSIONS
Transgastric NCC is rarely accepted by females but accepted by a quarter of males. Females consider rigid-hybrid tvNCC and SL-CC similarly attractive. Despite promising new techniques, three-quarters of male and one half of female patients still prefer the standard laparoscopic CC.