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**WHO NOSE? TRANSNASAL GASTROSCOPY MIGHT BE BEST—A PILOT FEASIBILITY, SAFETY AND ACCEPTABILITY COMPARATIVE STUDY**

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**Introduction** Standard upper endoscopy (SE) is an integral aspect of diagnostic and therapeutic gastroenterology. Patients

frequently request conscious sedation as they perceive the procedure may cause pain or discomfort. Administration of sedation incurs additional costs and risks. Transnasal endoscopy (TNE) has the potential to overcome these issues as it does not induce the pharyngeal reflex and does not require conscious sedation.

**Aims/Background** To compare the feasibility, safety and tolerance of TNE as a viable alternative to SE.

**Method** Patients scheduled for routine upper endoscopy were prospectively recruited and invited to undergo a non-sedated TNE procedure. A further group of patients scheduled for non-sedated SE were invited to participate as a control group. The SE procedures were performed using standard protocol with topical application of oral Xylocaine 10–30 mgs and a standard size Olympus gastroscope. All TNE procedures were performed using a Pentax EG-1690K 5.4 mm transnasal gastroscope via the nasal floor following application of instill-gel nasally and topical oral Xylocaine 10–30 mgs. Post procedure fasting (1 hour) and recovery advice was the same for both groups. The indication, duration and complications of each procedure were recorded. A visual analogue scale was used to assess overall patient tolerance and tolerance for each of the following parameters; pain, gagging, choking and anxiety graded on a 0–10 scale. All results were expressed as a mean and compared with a student T-test using SPSS 19. A P value of  $<0.05$  was considered significant.

**Results** To date, 22 patients, 12 men, mean age 56 years (range 35–74) have been enrolled, 12 in the TNE group and 10 in the SE group. Indications were GORD ( $n=7$ , 31%), dysphagia ( $n=6$ , 27%), epigastric pain ( $n=5$ , 22%) and nausea ( $n=4$ , 18%). All procedures were completed with intubation to D2. There were no complications. There were no differences in mean procedure duration for either TNE or SE (TNE 9.3 mins; SE 9 mins). Both procedures were well tolerated with VAS scores of 2.3 and 3.4 for TNE and SE respectively ( $p<0.03$ ). However, there was a significant advantage for TNE versus SE for choking on intubation (3.2 vs 5.4,  $p<0.03$  95% CI 1.4–4.9), gagging on intubation (2.4 vs 5.1,  $p<0.03$  95% CI 1.2–3.8) and gagging during the procedure (1.8 vs 4.1,  $p<0.03$  CI 1.2–2.9).

**Conclusion** Our pilot study suggests that TNE may be useful as a tool in diagnostic upper endoscopy. It is reliable, safe and better tolerated by patients compared to SE. Potential added advantages included improved views, reduced length of stay and fewer complications. Ongoing recruitment will be required to address this.