# How Can We Ensure that the Perioperative Management of Patients Undergoing Endoscopic Retrograde Cholangiopancreatography (ERCP) is Safe?

Sir,

New guidelines for the perioperative management of patients undergoing endoscopic retrograde cholangiopancreatography (ERCP) have been published.[1] Both monitored and general anaesthesia (GA) are used for these patients, and the choice of technique depends on the nature of the procedure, underlying comorbidities, and urgency of the procedure. A structured approach at the institutional level can help deliver safe care to all non-operating room anaesthesia (NORA) patients, including those undergoing ERCP.

While monitored anaesthesia care is the preferred mode of anaesthesia plan for most cases, we agree with the expert panel recommendation that other factors should also be considered. In cases where the procedure is short and there is no risk of aspiration, a monitored anaesthesia care plan is a suitable choice. However, in patients who are at risk of respiratory complications and where the ERCP procedure is complex, GA with endotracheal intubation should be preferred. Although this guidance is a new addition to the literature, it is important for the reader to remember that only 12 experts participated in this survey. Therefore, we believe that all healthcare institutions should develop their own policies and protocols, particularly focusing on high-risk patients. The consensus statement on the risk of intraoperative and postoperative respiratory adverse events has not added anything new as all the perioperative physicians are aware of the brief episodes of hypopnea at the time of administering the sedative drugs. These events usually resolve spontaneously with basic airway management techniques such as head tilt/jaw lift manoeuvers. In our experience, we have seen that patients with a history of obstructive sleep apnoea who require a lengthy procedure are at risk of respiratory complications resulting from repeated doses of sedative agents. Smaller sedative doses are less likely to cause hypotension in patients with poor heart function. Complex ERCP procedures (abscess drainage, gastric outlet obstruction, and prolonged procedures) should be performed under GA.[2] Therefore, in decision making, all variables should be kept in the frame.

At the Shaukat Khanum Memorial Cancer Hospital and Research Centre, we follow a structured approach for all NORA cases. All patients undergo a thorough pre-anaesthesia evaluation by a consultant before the procedures.[3] One of the main objectives of this evaluation is to identify high-risk patients. On the day of the procedure, written and informed consent is taken and it is ensured that all scheduled cases are nil per os. Over the last few years, we have developed a modified WHO safety checklist to help avoid human error. All sedation and GA procedures are performed under the direct supervision of an anaesthesia consultant who is physically present in the radiology suite. The patient is continuously monitored and records are maintained in the hospital information system. A difficult airway trolley is available within 5 min, and resuscitation equipment is readily available. Audits of these NORA services are conducted annually, and educational activities run throughout the year.[4] After the procedure, all patients are transferred to the post-anaesthesia care unit (PACU), where they are monitored for any adverse events. Patients are discharged once they meet the post-anaesthesia discharge scoring system criteria. At the time of discharge, both verbal and written instructions are provided. This structured approach at our centre ensures that patients remain safe.

In summary, hospitals should have written policies and procedures for patients undergoing sedation and GA outside the operation theatre. A modified WHO safety checklist is a useful tool for decreasing the risk of human error. Complex ERCP procedures will benefit from GA and endotracheal intubation. Regular annual audits and continuous medical education of healthcare professionals play a key role in patient safety. All patients should be monitored after the procedure in the PACU and discharged only when they meet the discharge criteria. At the time of discharge, clear instructions should be provided to the patients and their families.

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