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Analysis of National Bariatric Surgery Related Clinical Incidents: Lessons Learned and a Proposed Safety Checklist for Bariatric Surgery

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Background: Hundreds of thousands of patient-safety clinical incidents are reported to the National Reporting and Learning System (NRLS) database in the UK every year. The purpose of this study was to identify bariatric surgery-related learning points from these incidents.

Methods: We analyzed bariatric surgery-related clinical incidents reported to the UK NRLS database between 01 April 2005 and 31st October 2020. The authors used their experience to identify learning themes and design a safety checklist.

Results: We identified 541 bariatric surgery-related clinical incidents in 58 different themes. Preoperative incidents represented 30.3% (N = 164), intraoperative 38.1% (N = 206), and postoperative accounted for 31.6% (N = 171). In terms of severity of incidents, (150;27.7%) were of high severity, whereas medium and low severity incidents were (244;45.1%) and (147;27.2%) respectively.

The most commonly reported high severity theme was failure of thromboprophylaxis (50;9.2%). Intraoperative high severity incidents included 17 incidents of stapling of orogastric/nasogastric tubes or temperature probes, 8 missed needles, 8 broken graspers, and 6 incidents of band parts left behind. Postoperatively, the most commonly reported high severity theme was improper management of diabetes mellitus (35;6.5%).

Medications errors represented a significant proportion of the medium severity incidents and included (26;4.8%) incidents of improper or missed prescription of routine medications and anticoagulants preoperatively and (45;8.3%) wrong prescriptions, dosage or prescribing of contraindicated medications postoperatively.

Conclusion: We identified 58 specific themes of bariatric surgery-related clinical incidents. We proposed specific recommendations for each incidents theme in addition to a bariatric safety checklist to help improve the safety of bariatric surgery worldwide.