Ambulatory Anorectal Surgery

Prepared by: The Standards Task Force
The American Society of Colon and Rectal Surgeons

Drs. Ronald Place; Neal Hyman, Project Coordinators; Clifford Simmang, Committee Chairman; Peter Cataldo; James Church; Jeff Cohen; Frederick Denstman; John Kilkenny; Juan Nogueras; Charles Orsay; Daniel Otchy; Jan Rakinic; Joe Tjandra

The American Society of Colon and Rectal Surgeons is dedicated to assuring high-quality patient care by advancing the science, prevention, and management of disorders and diseases of the colon, rectum, and anus. The Standards Committee is comprised of Society members who are chosen because they have demonstrated expertise in the specialty of colon and rectal surgery. This Committee was created to lead international efforts in defining quality of care for conditions related to the colon, rectum, and anus. This is accomplished based on the best available evidence, resulting in Clinical Practice Guidelines. These guidelines are inclusive and not prescriptive. Their purpose is to provide information on which decisions can be made, rather than dictate a specific form of treatment. These guidelines are intended for the use of all practitioners and health care workers and patients who desire information about the management of conditions addressed by the topics covered in these guidelines.

Clinical Practice Guidelines for Ambulatory Anorectal Surgery

Ambulatory surgery encompasses those surgical interventions that are more complex than office-based procedures performed under local anesthesia but less complex than major procedures requiring at least an overnight stay.(1) Potential benefits of outpatient surgery include more rapid return to the comforts of a home environment, diminished opportunities for nosocomial complications, and diminished cost.

Ambulatory Facilities

Anorectal Surgery May Be Safely and Cost-Effectively Performed in an Ambulatory Surgery Center.

Level of evidence - Class III (Appendix A). It has been estimated that 90 percent of anorectal cases may be suitable for ambulatory surgery.(2) A wide variety of anorectal conditions including condylomata, fissures, abscesses, fistulas, tumors, hemorrhoids, pilonidal disease, and various miscellaneous conditions have been shown to be amenable to surgery on an outpatient basis.(3) An admission rate of 2 percent has been reported.(4) A reduction in hospital charges of 25 to 50 percent has also been noted.(5,6)
Patients With American Society of Anesthesiology (ASA) Classifications I and II Are Generally Considered Suitable Candidates for Outpatient Anorectal Surgery (Appendix B).

**Level of evidence - Class III.** Multiple factors must be considered in determining the appropriateness of performing anorectal surgery in the ambulatory setting.(7) The ASA physical status classification is useful to determine the risk of anesthesia.(3,8) The magnitude of the proposed surgery, type of anesthesia, availability of appropriate instrumentation, ability of the patient to follow instructions, distance of the patient's home from the surgical center, and home support structure all need to be considered.

*Selected ASA Category III Patients May Also Be Appropriate Candidates.*

**Preoperative Evaluation**

*Preoperative Investigations (e.g., Laboratory Studies and Electrocardiograms) Should Be Dictated by History and Physical Examination.*

**Level of evidence - Class III.** Multiple studies have documented that patient history and physical examination are the key elements of an appropriate preoperative evaluation. Routine preoperative investigations that are not warranted on the basis of history and physical seem to provide little further information. There is clear evidence that nonselective preoperative screening yields few abnormal results.(9) One study of 1,200 patients undergoing ambulatory surgery revealed that the vast majority of abnormalities could have been predicted by history and physical examination.(10) These abnormalities did not predict perioperative complications or the need for hospital admission. A separate study of 1,109 patients undergoing elective surgery revealed that 47 percent of laboratory investigations duplicated tests performed within the previous year.(11) Meaningful changes in the repeat lab values were very rare. Such abnormalities were predictable by the patient's history. A further study of 5,003 preoperative screening tests revealed 225 abnormal results. Only 104 were of potential importance and the abnormality caused action in only 17 cases. It was believed that only four patients could have had a conceivable benefit from their preoperative screening test.(12)

Similar studies have been performed to investigate the value of specific tests. A study of 12,338 patients undergoing invasive procedures was performed to examine the value of determining activated partial thromboplastin time as a routine.(13) Ninety-two percent of the patients were believed to be at low risk (there were no clinical factors to suggest the bleeding tendency). In these patients, it was shown that no information was gained from activated partial thromboplastin time, and therefore, clotting studies had no role as a screening test in asymptomatic patients. Similarly, routine cardiac workup seems unjustified. The risk of a perioperative myocardial infarction in patients without clinical evidence of heart disease is 0.15 percent.(14) This risk increases significantly in patients who had a previous myocardial infarction. History and physical examination are the cornerstones of appropriate preoperative evaluation.
Intraoperative Considerations

Most Anorectal Surgery May Be Safely and Cost-Effectively Performed Under Local Anesthesia; Regional or General Anesthesia May Be Used Depending Upon Patient or Physician Preference.

Level of evidence - III. The use of local anesthetics such as monitored anesthetic care for anorectal surgery is safer and has fewer complications that other anesthetic techniques.(15-19) Perianal infiltration of local anesthetics is a simple procedure that is easily learned.(20-22) Injection of the local anesthetics can be accomplished in less than five minutes and the operation begun immediately. However, the anesthetic technique used for any procedure should be the one that provides for maximal safety and efficacy.

Postoperative Considerations

Anorectal Surgery Patients May Safely Be Discharged From the Postanesthesia Care Unit.

Level of evidence - II. The time course for recovery from anesthesia includes early recovery, intermediate recovery, and late recovery.(23) Early recovery is the time interval for anesthesia emergence and recovery of protective reflexes and motor activity. The Aldrete score (24) has been used for 30 years to determine release from phase 1 (early) recovery to a hospital bed or phase 2 (intermediate) recovery. Intermediate recovery is the period during which coordination and physiology normalize to an extent that the patient can be discharged from phase 2 recovery in a state of "home readiness" and be able to return home in the care of a responsible adult. The Post-Anesthetic Discharge Scoring System has been shown to be efficacious for discharge.(25-29)

Multiple Modalities May Be Used to Achieve Adequate Postoperative Pain Control.

Level of evidence - II. If local anesthetics are not used as the primary anesthetic technique, their use will provide prolonged postoperative analgesia.(30-32) Oral narcotics may be used as primary postoperative analgesia. The use of nonsteroidal anti-inflammatory drugs, particularly intramuscular or intravenous Toradol® (Roche Pharmaceuticals, Nutley, NJ) (33-35) or sulindac suppositories(36) have also shown improved analgesia, lower narcotic usage, and lower rates of urinary retention. Although the effect is unknown, oral metronidazole shows improved postoperative pain control.(37)

Postoperative Urinary Retention Can Be Reduced by Limiting Perioperative Fluid Intake.

Level of evidence - III. Multiple studies have shown that limiting perioperative fluid lowers the incidence of postoperative urinary retention.(38-41) These same studies
show conflicting evidence over the relationship between gender, age, and the quantity of narcotic medication and urinary retention. Hemorrhoidectomy and the performance of multiple anorectal procedures have higher rates of urinary retention.(38,40)

*Postoperative Education Should Include Recommendations for Sitz Baths, Fluid Intake, and Activity Limitations.*

**Level of evidence - III.** Textbooks of anorectal surgery(42,43) advocate consistent instructions before discharge from ambulatory surgery. Although derived from common sense, scientific justification does not exist.(44,45) With appropriate communication, ambulatory anorectal surgery may be performed with a high degree of patient satisfaction.(46)
Appendix A

Level of evidence:(47)

Level I
Evidence from properly conducted randomized, controlled trials.

Level II
Evidence from controlled trials without randomization, or cohort or case-control studies, or multiple times series, dramatic uncontrolled experiments.

Level III
Descriptive case series or opinions of expert panels.(8)
Appendix B

American Society of Anesthesiologists Physical Status Classification

Class I: Patient has no systemic disturbance (e.g., healthy, no medical problems).
Class II: Patient has mild to moderate systemic disturbance (e.g., hypertension, diabetes).
Class III: Patient has severe systemic disturbance (e.g., heart disease that limits activity).
Class IV: Patient has severe systemic disturbance that is life threatening (e.g., unstable angina, active congestive heart failure).
Class V: Patient is moribund and has little chance of survival (e.g., ruptured abdominal aortic aneurysm).

The practice parameters set forth in this document have been developed from sources believed to be reliable. The American Society of Colon and Rectal Surgeons makes no warranty, guarantee, or representation whatsoever as to the absolute validity or sufficiency of any parameter included in this document, and the Society assumes no responsibility for the use or misuse of the material contained here.

It should be recognized that these guidelines should not be deemed inclusive of all proper methods of care or exclusive of methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific procedure must be made by the physician in light of all of the circumstances presented by the individual patient.
References


