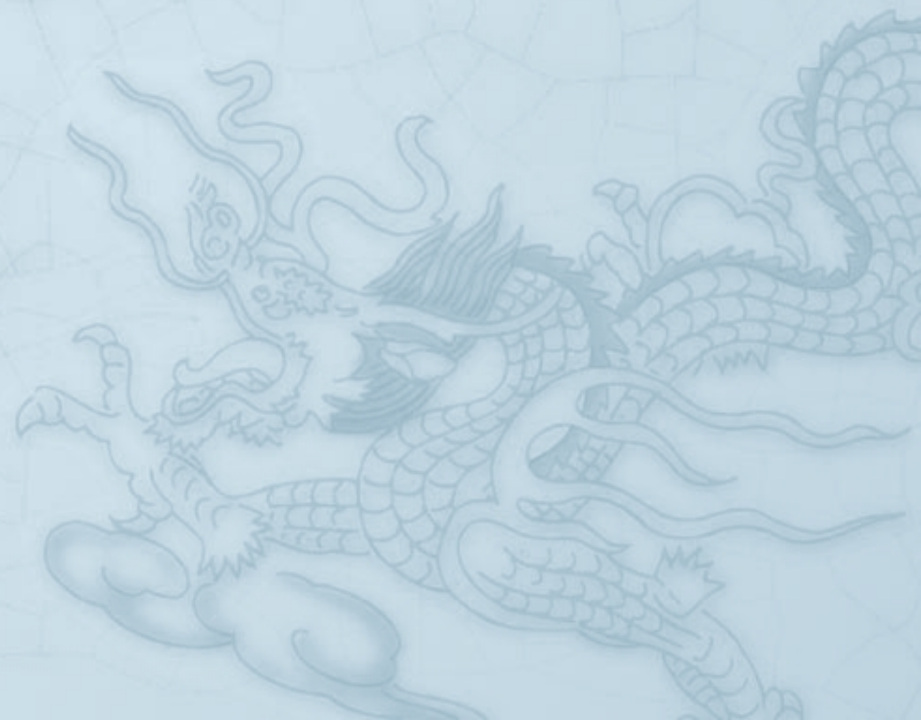


日间手术的麻醉





模式。日间手术具有明显缩短住院时间、加快床位周转、降低院内感染、提高医疗资源使用效率的优势，已得到患者、医护人员及卫生行政部门的关注和肯定。由于日间手术患者住院时间短、流动性大、周转快，对麻醉及围术期管理提出了更高的要求。



日间手术的概念



医疗水平的差异，由各地区、医院制定符合自身实际情况的日间手术模式。

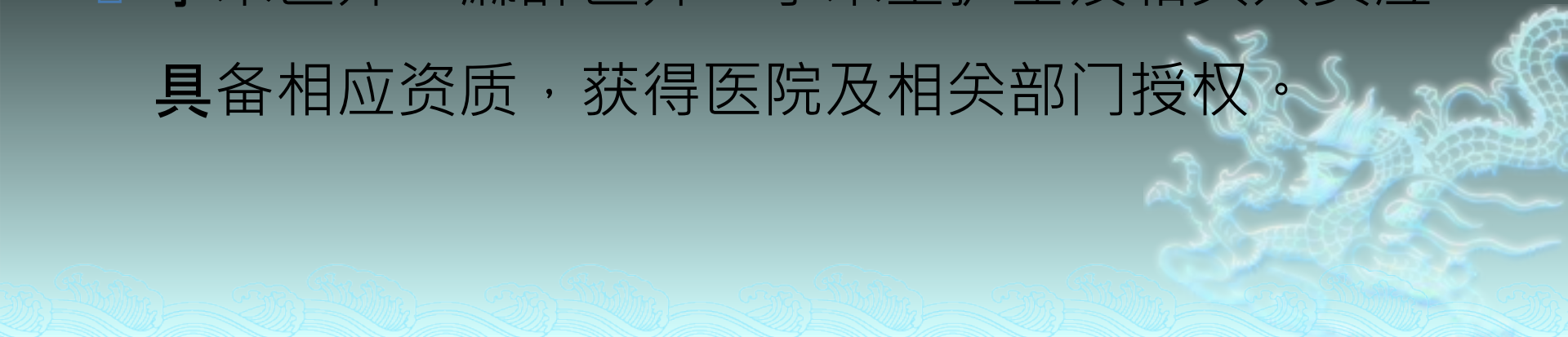


开展日间手术及麻醉的基本条件



药品，以及具备成熟的抢救流程。

- 手术医师、麻醉医师、手术室护士及相关人员应具备相应资质，获得医院及相关部门授权。



日间手术的种类



术。

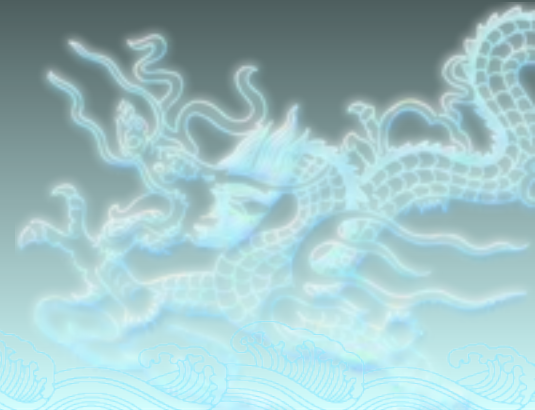
- 各医院应综合考虑其医疗场所、设备条件、医疗水平及患者情况等多方面因素，在确保医疗质量和医疗安全的前提下，选择可开展的日间手术。
- 日间手术不同于传统手术模式，手术患者应严格筛查，以确保患者能安全进行日间手术。

日间手术的种类

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- • “舒适医疗”发展的需要
- • “无痛医院”建设的需要
- • 丙泊酚、依托咪酯、瑞芬太尼、舒芬太尼以及右旋美托咪定等
- 新型静脉麻醉药物的出现，为舒适医疗的实施提供了可能。

日间手术的种类

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- 无痛内镜检查及胆胰胆管造影（ERCP）
- 无痛支气管镜检以及气管、支气管介入治疗手术(EBUS)
- **无痛人流**
- 无痛牙科诊疗
- **无痛介入放射学治疗（心、脑血管等）**
- 无痛肿瘤消融治疗（肝癌、肺癌）
- 不配合诊疗患者



手术室外麻醉的风险

- 远离手术室，地方拥挤
- 光源、电源受限
- 吸引装置不足
- 设备老化
- 监护设备不全
- 其他人员对麻醉操作不熟悉
- 术前评估可能由其他人员（门诊）完成，对病人病理生理状态和麻醉的关系考虑不尽相同。

Introduction

More and more frequently anaesthetists must be able to provide complete anaesthetic care outside the traditional environment of the operating room. Providing nonoperating room anaesthesia (NORA) has gained widespread popularity. Both the number and the complexity of these therapeutic and diagnostic procedures are increasing. Performing NORA cannot, in most cases, be compared with traditional anaesthesia care inside the operating room. It has its specific logistical problems resulting in specific patient selection, preoperative patient assessment, peri-operative morbidity and mortality and post-operative patient follow-up and treatment. The present review will focus on morbidity and mortality associated with NORA. However, performing a literature search, few data related to this topic were available.

Nonoperating room anaesthesia: specific problems

Technically demanding procedures are performed in patients with more and more altered conditions. For many of these, long duration and extremely different diagnostic or therapeutic procedures are more and more frequently performed. In our hospital, a tertiary care university hospital, more than 7000 NORA procedures were performed in 2007, which represents approximately 13% of our total anaesthetic workload. Over a 10-year period, the number of NORA procedures has doubled. In a paediatric hospital, Adams *et al.* [1] have reported that the NORA activity has increased four-fold in 6 years.

Pino [2] reported that 12.4% of all anaesthetic activity was performed outside the operating room. A large proportion of NORA patients are paediatric patients.

Anaesthesia and sedation in remote locations are associated with some specific issues. Owing to small, crowded rooms with bulky equipment resulting in limited access to the patient, patient safety may be compromised. Situations are further complicated by insufficient lighting conditions and limited electrical power supply. In most locations, appropriate suction equipment is not available. In many facilities, the NORA service uses outdated, old equipment. In smaller hospitals, despite the existence of national and international guidelines on monitoring during anaesthesia, minimal monitoring equipment is not always available. A third difference between conventional anaesthesia and NORA is the presence of personnel who are less familiar with the management of anaesthetized patients. Especially in emergency situations, properly trained personnel are of vital importance [3]. The choice of anaesthetic technique is probably not associated with differences in outcome. Factors related to the introduction of physiological monitoring, the experience and training of staff and changes in peri-operative management have a greater effect on mortality [4,5]. Additionally, flexibility is demanded more and more often from anaesthetists to allow efficient planning and use of resources [6].

As a result, it is expected that more complications occur with NORA than with conventional anaesthesia in an

手术室外 麻醉的风险—常见并发症

•麻醉医生面临的辐射风险

•污染：吸入性麻醉药物

•低温

•低血容量

•气道管理困难

•胃内容物反流，误吸

•过敏性休克

•术后恶心、呕吐

•操作相关性并发症

C. MELLONI

Exposure to electromagnetic fields

Anesthesiologists' harm

Again I was unable to find any relevant article dealing with accidents or incidents occurring to anesthesiologists while working in remote locations in comparison with the OR; exposure of anesthesiologists to environmental dangers has been studied apparently only for OR.

I am expecting an increase in the exposure to electromagnetic fields since many of the anesthesia outside the operating room (OORA) are in fact producers of EMF and normal OR are already often in excess over 2.5 mg, a value accepted as "safe".

Although the health hazards related to EMF exposure are still equivocal, anesthesiologists should consider making an effort to improve their environment and reduce their exposure to EMF.

Contamination/pollution

Since many remote locations have no provision for gas scavenging the use of inhalational anesthesia in these areas will certainly cause higher levels of exposure to inhalation agents for all personnel present, so that a clear indication exists for total intravenous sedation/anesthesia. Difficulties with IV access, especially in the paediatric age group could however justify the presence of all the equipment for inhalational anesthesia. As a matter of fact, once that the place is equipped it should include the possibility to choose whatsoever anesthesia/sedation available.

Hypothermia

Monitoring of temperature is rarely employed in OR; and it is not surprising that it would be absolutely exceptional in OORA. I believe

anxiety pain
reflexes are

RCM

reports
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3% of all
it is the
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reporting of adverse reactions. With the introduction of the new generation of non-ionic, low-osmolar RCM, this risk has been reduced 5-10 fold.⁴⁰

Iohexol (Omnipaque) is another new, second generation RCM. It is the most frequently used x-ray contrast medium for arteriography, cardiology, urography, hys-

Because FOSV could be elicited by vestibular stimulation due to early ambulation, patients should be invited to lay still after the procedure until they feel fit to leave and every movement should be accomplished with calm adopting the upright posture in steps; orthostatic hypotension can be treated with vasopressors (ephedrine, Effortil) at the same time avoiding disturbing visual or olfactory stimuli.

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Technique or procedure related complications

Perforation of the bowel during colonoscopy may be increased due to the lack of the subjective symptoms of impending perforation in an anesthetized patients; however colonoscopy with a sedated or anesthetized patient could contribute to a more relaxed examination without haste from the part of the surgeon and therefore contribute to better diagnosis and localization of lesions, notwithstanding the gratitude of the patients.

MRI has a peculiar range of complications linked to the existence of the strong magnetic field with missile being attracted into the magnet like needles, pumps, chairs, and catastrophic incidents with oxygen tanks.

Transferring patients from stretchers or chairs to X-ray tables represents often a problem and injuries have followed from falls, slip-
pline, improper positioning on non padded

anxiety pain
reflexes are

手术室外麻醉场地指南

Int Anesthesiol Clin. 2003 Spring;41(2):1-15.

Anesthesia Outside the Operating Room: General Overview and Monitoring Standards

Fayez Kotob, MD

Rebecca S. Twersky, MD

Table 2. Check-off List for Anesthesia Outside the OR

1. Are oxygen source and suction available?
2. Are they freestanding or piped into the wall, and if so are they in reach of the patient?
3. Is the lighting sufficient?
4. Are there enough electrical outlets?
5. Which drugs and equipment do I need to bring? Which are provided at the site?
6. Are monitors available and functioning?
7. Is there an emergency cart?
8. Are the staff familiar with utilizing the emergency cart?
9. Is there a place for general anesthesia to be induced?
10. If anesthesia is induced in an area different from the procedure area, must equipment and drugs be transported with the patient?
11. Are the site staff familiar with the response to anesthesia emergencies?
12. What is the backup plan for emergencies?
13. Are there any site-specific hazards to the anesthesia personnel and to the patient (e.g., radiation)?
14. Where will the patient recover after the anesthesia and procedure?

- ← 可靠的氧源
- ← 可靠的吸引装置
- ← 可靠的废弃排放系统
- ← 需要具备以下设备：简易呼吸囊、适当的监护设备、适当的麻醉药物、器材、设备
- ← 充足的电源插座
- ← 充足的照明设备
- ← 足够的空间
- ← 抢救装备：除颤仪、抢救车等
- ← 辅助人员、通信设施
- ← 合理的麻醉后处理
- ← 安全操作条例、制度

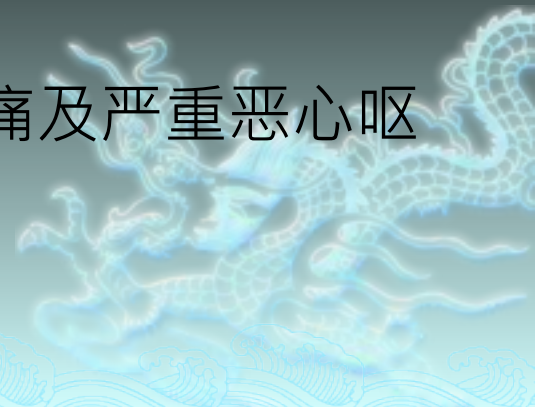
适合日间手术及麻醉的患者一般应符合以下条件

□

□

位、患者自身情况、麻醉方式、合并症严重程度和控制情况综合判断。

- （ 3 ） 预计患者术中及麻醉状态下生理机能变化小。
- （ 4 ） 预计患者术后呼吸道梗阻、剧烈疼痛及严重恶心呕吐等并发症发生率低。

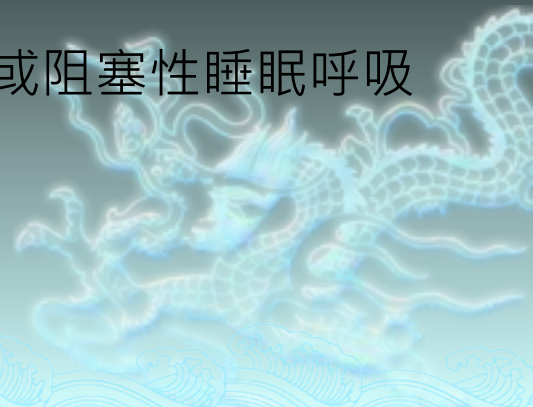


下列情况不建议行日间手术

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者（如恶性高热家族史，过敏体质者）。

- （5）近期出现急性上呼吸道感染未愈者、哮喘发作及持续状态。
- （6）困难气道。
- （7）估计术后呼吸功能恢复时间长的病理性肥胖或阻塞性睡眠呼吸暂停综合征（OSAS）患者



日间手术的麻醉前评估与准备



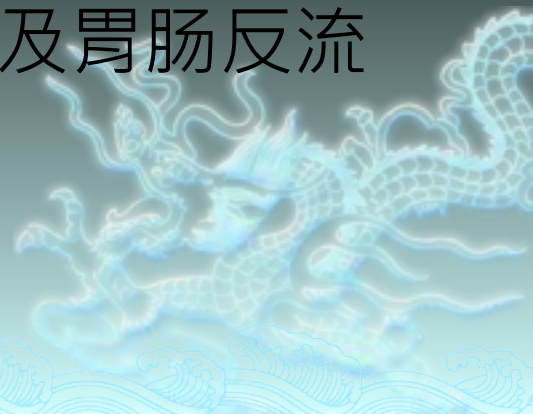
手术当日麻醉医师都应于手术开始前与患者进行面对面直接沟通和评估。



评估内容

□ 病史、体格检查、辅助检查

患者术中可能出现的特殊麻醉问题，包括困难气道、恶性高热易感者、过敏体质、肥胖症、血液系统疾病、心脏病、呼吸系统疾病以及胃肠反流性疾病等。



术前检查及准备

□

术前评估及准备

- 对于有并存疾病的患者，在仔细评估病情的基础上安排合理的术前准备，必要时和相关学科医师共同制定术前准备方案并选择合适的手术时机，增加患者对麻醉手术的耐受性和安全性。

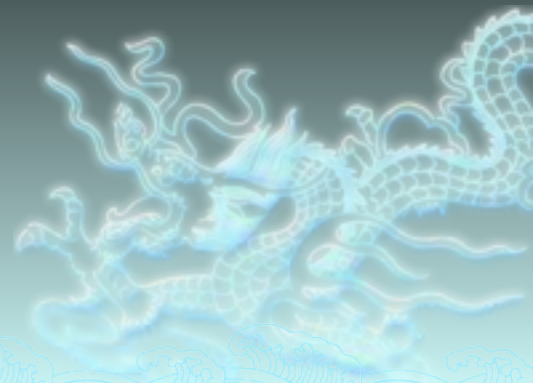


术前须知及用药



时履行告知义务，签署手术、麻醉知情同意书。

- ✧ 原则上不需要麻醉前用药。对明显焦虑、迷走张力偏高患者可酌情用药。



以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/448120032131006054>