

# Day-case surgery patient selection and discharge criteria in children

 Feride MEHMETOĞLU

Department of Pediatric Surgery,  
Dörtçelik Children's Hospital, Bursa,  
Türkiye

## ORCID ID

FM : 0000-0002-8387-5296



Day-case surgery (DCS) is a planned procedure, in which patients are admitted for surgery and discharged on the same day. DCS confers major advantages for the child and the family, as it reduces the potential negative impact of an overnight stay and allows for the patient to have familiar surroundings during recovery. Children are excellent candidates for DCS because they are usually healthy, free of systemic disease, and typically require straightforward, minor, or intermediate surgical procedures. While there are numerous well-accepted benefits of DCS for patients and health-care organizations, one problem with this approach is determining if the procedure is feasible and safe. Effective patient selection and postoperative assessment with protocol-driven discharge is fundamental for DCS but requires experience and an understanding of the criteria for each intervention. This study aimed to present the criteria for patient selection and discharge of pediatric surgery patients who underwent DCS.

**Keywords:** Day-case surgery, discharge checklist, exclusion criteria, patient selection, pediatric surgery.

Dortcelik Children's Hospital DCS protocol was presented at the National Congress of the Turkish Federation of Associations of Pediatric Surgeons in Antalya, Türkiye, 2021, and at the 3<sup>rd</sup> International Medical Congress of Democracy University in İzmir, Türkiye, 2021.

**Cite this article as:** Mehmetoğlu F. Day-case surgery patient selection and discharge criteria in children. Zeynep Kamil Med J 2023;54(4):173–178.

**Received:** March 24, 2023 **Revised:** May 18, 2023 **Accepted:** May 26, 2023 **Online:** October 06, 2023

**Correspondence:** Feride MEHMETOĞLU, MD. Dörtçelik Çocuk Hastanesi, Çocuk Cerrahisi Kliniği, Bursa, Türkiye.

**Tel:** +90 224 275 20 00 **e-mail:** mferide@yahoo.com

Zeynep Kamil Medical Journal published by Kare Publishing. Zeynep Kamil Tıp Dergisi, Kare Yayıncılık tarafından basılmıştır.

**OPEN ACCESS** This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>).



## INTRODUCTION

Day-case surgery (DCS) is a spectrum of surgical procedures that allows the patient to go home on the day of surgery, usually after a few hours. The concept of organized DCS (day-stay, ambulatory, and outpatient) for children was first put forward by Pediatric Surgeon James Nicoll in 1909 in light of results obtained at the Glasgow Children's Hospital.<sup>[1]</sup> DCS represents high-quality patient care, less traumatic surgical techniques, enhanced recovery, minimal adverse events, increased patient confidence, provision of appropriate information, and postoperative support. This approach has been made possible by improved anesthetic pharmacology, increased use of regional anesthesia, innovative surgical techniques, and improved perioperative management of comorbidities.<sup>[2–4]</sup>

Historically, children undergoing day surgery with no obvious anesthetic or surgical complications were discharged within a set time. However, it is now accepted that all children recover at their own pace, not within a certain period of time. The time for a child to be discharged home after day surgery is based on the individual and dependent on anesthetic, surgical and social factors, as well as the adequacy of postoperative symptom control.<sup>[5,6]</sup>

With the recognition of the potential risks of hospitalization, day surgery is now an increasingly established practice worldwide and has significantly evolved since the early days of the specialty, which involved performing minor procedures on eligible patients. The advantages of DCS for children are (1) less time away from home, allowing the child to sleep in their own bed that night, (2) reduced disruption to family routines and sibling care, (3) reduced nosocomial infections, (4) early mobilization, (5) early return to school, and (6) reduced surgical waiting lists.<sup>[7–9]</sup>

### Selection Criteria

A multidisciplinary approach, with agreed-upon protocols for patient assessment, including inclusion and exclusion criteria for day surgery, should be established among the surgeons and the anesthetic department to determine whether the procedure is appropriate for DCS.<sup>[10,11]</sup> To achieve a successful outcome for the child, or young person and their family, parents/care takers should be involved in the decision-making process regarding treatment options, consulted on the expected path of care, and encouraged to be active participants.<sup>[12–14]</sup> Four areas are considered key in the selection of patients, these are patients (body mass index, comorbidities and age), procedure, anesthetic considerations, and family.

### Patient

Most children are healthy and well suited for DCS. Any child in good general health (American Society of Anesthesiologists [ASA] physical status I or II) is accepted by most DCS units.<sup>[2,15]</sup> DCS may be ideal for ASA class III patients whose systemic diseases, such as diabetes, asthma, or epilepsy, are well controlled and are often better managed with minimal disruption to their daily routine, as facilitated by day surgery.<sup>[16,17]</sup> Children with siblings affected by sudden infant death syndrome are not eligible for DCS up to 1 year of age.<sup>[18]</sup> In addition, the following parameters are considered.

### Body Mass Index (BMI)

Obesity presents challenges to both surgeons and anesthesiologists. The first guidelines recommended that patients with a BMI over 30 kg/m<sup>2</sup> should not be selected for DCS. The rationale is that surgery might be more difficult, take longer, result in greater blood loss and higher unplanned hospital admissions.<sup>[19,20]</sup> However, more recent guidelines set no upper limit, suggesting that obesity is not a contraindication to DCS and that morbidly obese patients can be managed safely with expert care. Most complications occur during the procedure or in first-stage recovery and resolve early in the recovery period. An overnight stay is unlikely to confer any benefit, and in fact, bariatric DCS is a developing area.<sup>[3,4]</sup>

### Comorbidities

Patients with inadequately controlled systemic diseases (e.g., epilepsy, asthma, and diabetes mellitus), active viral or bacterial infections (especially respiratory), complex congenital heart diseases, uninvestigated cardiac murmurs, metabolic disorders that cannot tolerate starvation, hemoglobinopathy, and obstructive sleep apnea are not suitable for DCS.<sup>[19,21]</sup> Appropriate assessment of children who have other major illnesses should be confirmed before the day of surgery if DCS is planned.<sup>[22]</sup> Children with comorbidities and special needs should be placed on the operation list at the most convenient time.<sup>[20,23]</sup>

### Age

The lower age limit for DCS depends on the facilities, staff experience, and the medical condition of the infant. Young babies with cardiac or respiratory problems, low birth weight, and those requiring opiate analgesia need careful consideration. The general consensus is that otherwise well-term babies are appropriate candidates for DCS once they reach 44–46-week post-conception age (PCA). Former premature infants <60 weeks of PCA and low-birth weight infants are generally excluded from DCS. These patients generally have immature respiratory control (apnea), immature temperature control (hypothermia), and immature airway reflexes (aspiration) and suffer from bronchopulmonary dysplasia, retinopathy, hypoglycemia, hypocalcemia, and anemia. The management of former premature infants between 50 and 60 weeks of PCA following minor surgery should be considered on an individual basis; postoperative progress must be uneventful, and suitability for discharge must be confirmed by an anesthesiologist and a senior member of the surgical team following a 6-h postoperative period of observation. Many tertiary centers adopt a lower limit of 44 weeks of PCA for complex procedures as day cases. However, cases need to be considered individually, and risks should be discussed with parents and caregivers. Despite a consensus that ambulatory surgery is safe for children, data to guide discharge readiness are limited for children 6 months and older of age and absent for those younger than 6 months.<sup>[17,19,24–28]</sup>

### Procedure

Surface procedures without major encroachment on a body cavity are most suitable. Procedures should be associated with minimal bleeding and typically take no more than 1 h to complete.<sup>[2]</sup> While the operative time for DCS is usually limited to 1 h, there have been

examples of procedures lasting for 1.5 and 2 h in studies.<sup>[13,15]</sup> Patients with a previous history of complicated anesthesia or surgery should be considered for DCS eligibility. Postoperative pain should not be severe and must be manageable with oral analgesia after discharge home. The procedure should not have a significant risk of major postoperative complications necessitating immediate medical intervention (e.g., hemorrhage and cardiovascular instability).<sup>[4]</sup> Regarding the operating list order, fasting times should be minimized and operations with potentially longer recovery times should be scheduled earlier in the day to prevent unnecessary overnight stays.<sup>[24,25]</sup> A wide range of pediatric surgery procedures are appropriate for DCS (Table 1).

### Anesthetic Considerations

All anesthetists should be familiar with techniques that permit the patient to undergo a procedure with minimum stress and maximum comfort to enable early discharge, including regional nerve blocks and neuraxial blockade. Prolonged general anesthesia is associated with prolonged recovery and complications such as vomiting, which may increase inpatient admission rates. For these reasons, many units avoid procedures that consistently take more than 1 h to complete.<sup>[12,21,29]</sup> A special subgroup of neonates is the former premature infants. This group is at high risk of developing apnea after anesthesia regardless of whether a regional or general anesthetic is used.<sup>[17]</sup> Tracheal intubation is associated with complications such as postextubation stridor. Therefore, in day surgery units, tracheal intubation should be used appropriately in younger children. The staffing levels, equipment, monitoring, and facilities must be equivalent to those found in main operating rooms and recovery rooms elsewhere in the institution. The day-surgery unit should not be considered a “step-down” unit for minor surgery on minors.<sup>[11,25,30,31]</sup>

### Family

DCS does not suit the social circumstances of all children and their families. Pre-anesthetic assessment is an opportunity to assess information about the child, home circumstances, and parents/care takers, to establish who has parental responsibility and to ensure that appropriate consent procedures are followed. Unduly anxious parents and single parents with several other children may feel unable to cope with a child returning home so soon after surgery. The parents/care takers must agree with and be capable of understanding their role in providing minimal nursing care for their child following DCS during the first 48 h. Parents must be able to understand instructions, recognize complications that would require a return to the hospital (e.g., bleeding, drowsiness), and have readily available access to an emergency department after discharge.<sup>[2,12,32]</sup> Families with language barriers that make understanding advice difficult are not eligible for DCS.

### Discharge Exclusion Criteria

#### Anesthetic Discharge Exclusion Criteria

- Inexperienced anesthetist
- Unexpected intraoperative anesthetic events
- Prolonged procedure >1 h
- Difficult airway

**Table 1: Range of procedures and indications suitable for pediatric day-case management**

1. Superior labial frenulum
2. Lingual frenulum
3. Mucocele, ranula
4. Preauricular sinus
5. Preauricular cartilaginous tag
6. Thyroglossal cyst
7. Sinus, cyst or fistula of the branchial arch
8. Bronchoscopy
9. Endoscopy (gastric, colonic, rectal)
10. Esophageal dilatation
11. Gastrostomy
12. Hernia repair (epigastric, umbilical, reducible inguinal)
13. Labial adhesion
14. STING
15. Urethral dilatation
16. Hydrocele
17. Varicocele
18. Undescended testis
19. Buried penis
20. Penoscrotal web
21. Circumcision
22. Preputial adhesion
23. Urethral meatotomy
24. Cystoscopy
25. Distal hypospadias
26. Pilomatrixoma
27. Small hemangioma or lymphangioma
28. Excision skin lesions, biopsy
29. Congenital sacrodermal sinus
30. Rectal polyp
31. Anal dilatation
32. Ingrown toenail excision
33. Catheter removal
34. Suture removal/dressing changes
35. Pelvic examination under anesthesia
36. CT, MRI or other scans
37. Interventional radiology
38. Urgent procedures are also appropriate for a semi-elective day-case pathway, e.g., abscess drainage and some trauma surgeries.

- Malignant hyperthermia susceptibility
- Previous anesthetic problems leading to delayed recovery
- Dizziness or drowsiness
- Uncontrolled nausea and vomiting.

### **Surgical Discharge Exclusion Criteria**

- Inexperienced surgeon
- Unexpected intra-operative surgical events
- Prolonged procedure >1 h
- Significant risk of excessive perioperative hemorrhage
- Operations requiring blood transfusion
- Opening a body cavity (potentially excluding laparoscopy)
- Bleeding
- Exudation
- Wound drain
- Dehydration
- Pain unlikely to be relieved by oral analgesia after discharge home
- IV or IM drugs or the need for post-operative antibiotic administration.

### **Family and Social Discharge Exclusion Criteria**

- Parents incapable or reluctant to care for child at home
- Unsupported single parent with numerous children
- Inadequate housing conditions
- No telephone
- Lack of private transport with adult escort (public transport unacceptable)
- Inadequate postoperative transport arrangements
- Traveling time >1 h (50 km?) home after discharge

### **Post-Operative Recovery and Discharge**

#### **Time**

Recovery from an operation depends on several factors, including the duration of the operation, the site of the surgery, the anesthetic technique employed, the type of regional block, intra-operative fluid volume, and the age of the patient. There is no set time interval that should elapse before discharge. Those who meet the criteria for discharge on an individual basis (Table 2) can be discharged.<sup>[5,6,20]</sup> Vital signs must be stable and within age-appropriate limits for 30 min after the procedure. The discharge of patients with risk factors (e.g., bronchoscopy, prematurity, ASA class III, bleeding risk, and urological surgery) is recommended following a prolonged 6–12 h post-operative observation period. Special exceptions may be made at the discretion of the anesthesiologist, surgeon, or senior nursing staff for patients who would benefit from being discharged home earlier than usual, including patients with disabilities or special needs (e.g., Autism) and patients undergoing a short procedure (e.g., catheter removal).<sup>[25–33]</sup>

**Table 2: Multidisciplinary checklist for discharge after DCS**

1. Patient care can be provided equally well at home as at the hospital.
2. The patient's condition has been assessed by an anesthetist.
3. There are no respiratory signs or symptoms, and protective airway reflexes have been fully regained.
4. There were no unexpected intraoperative anesthetic events.
5. The patient shows appropriate consciousness-alertness for age, consistent with the preoperative state.
6. The patient shows appropriate stable vital signs for age, consistent with the preoperative baseline records.
7. The patient shows appropriate ambulation for age.
8. No major body cavity was entered.
9. There were no bleeding or surgical complications.
10. No complications are expected.
11. The wound site is clean, with no bleeding and no requirement for dressing changes.
12. The patient has no fever.
13. The patient has mild or no PONV.
14. The patient can tolerate small amounts of oral fluids (able to take fluids/solid food).
15. The patient should have no major pain, as DCS should require only simple analgesia.
16. No IV or IM drugs are needed postoperatively.
17. No special nursing postoperative care is required.
18. Any cannulas have been removed.
19. Required prescriptions have been given.
20. Written and verbal discharge instructions have been issued, including contact names and phone numbers.
21. The family is happy to take the child home and comprehends the post-procedural home care and instructions.
22. The family is able to recognize complications that would require traveling to an emergency department or returning to the hospital.
23. The patient can be escorted home by a responsible care giver.
24. The patient can be ready for discharge by 6:00 PM.
25. Timely discharge can be performed without haste once all the recovery milestones have been met.

### Oral Intake and Voiding

There is controversy over the requirement for patients to tolerate oral fluids/solid food and urinate before discharge. Many centers have required children to drink before discharge. However, studies have shown that drinking is not a prerequisite for the discharge of pediatric DCS patients, and there is no excess morbidity among children who refuse to drink. Tolerating oral fluids before discharge is desirable but not essential if they have received perioperative intravenous fluids, as long as provisions are made to provide adequate hydration when they get home. Some patients may not feel like eating immediately, and forcing them to do so may induce nausea. However, children with comorbidities such as diabetes should be evaluated on an individual basis.<sup>[5,14,20,33]</sup>

Waiting for the patient to pass urine may unnecessarily delay discharge, and it is not essential. Patients who fasted for an extended period and voided pre-operatively may wait many hours before voiding again. Passing urine is only a requirement if the child has undergone a urological, inguinal, rectal, or penile procedure or received neuraxial anesthesia. Parents should be informed to contact the hospital if the child has not passed urine within 6–8 h. Low-risk patients may be discharged with instructions for managing any subsequent difficulties.<sup>[6,9,10,14]</sup>

### Ambulation

Day surgery encourages patients to mobilize soon after their surgery. The child should return to their pre-operative status unless surgery has impacted this before discharge. Lower limb weakness due to motor blockade from a neuraxial or an ilioinguinal block need not delay discharge provided they are carried or have access to a pushchair. However, the duration of the residual sensory or motor effects should be explained to the caregivers. Older children may have their discharge delayed until they can safely walk.<sup>[14,24,34]</sup>

### Pain

Uncontrolled postoperative pain is an important constraint for the patient to meet discharge criteria in the expected time, as well as a common parental concern. Acute postoperative pain in children has several risk factors, including the following: Pre-operative anxiety, pre-operative pain, and two surgical procedures performed at the same time.<sup>[35]</sup> Children should not be discharged after day surgery until pain is well controlled and staff are confident that simple medication will provide adequate analgesia at home. Pain should be manageable by simple analgesia through rectal or oral paracetamol/ibuprofen.<sup>[9,29,36]</sup> Some common procedures with a high expected level of pain are testicular surgery, hernia repair, circumcision, hemorrhoidectomy, laparoscopy. Orchidopexy can cause significant pain for up to 2 weeks postoperatively.<sup>[10,37]</sup>

### Postoperative Nausea and Vomiting (PONV)

Prolonged PONV is a frequent source of discomfort during recovery and a major cause of overnight admissions in the pediatric population, with a rate twice as high as that in adults. Vomiting may be intractable or occur for the 1st time after discharge.<sup>[6,17]</sup> PONV has several contributing factors, including the following: age >3, postpubertal age in girls, preoperative anxiety, patient/family history of mo-

tion sickness or PONV, duration of fasting, type of surgery, technique (e.g., volatile anesthesia) and agent used (e.g., opioids) for anesthesia, duration of anesthesia >30 min, analgesic and antiemetic medications, the presence of pain, early postoperative mobilization, and early postoperative oral fluids. Pediatric surgeries considered emetogenic procedures are hernia repair (including umbilical), orchiopexy, penile surgery, herniorrhaphy, and gastroscopy.<sup>[1,38–40]</sup> By identifying these “at-risk” children and providing further interventions, PONV cases can be reduced and parental satisfaction increased.

Discharge criteria should be clear but modified to account for the maturing infant and child, with the changes in vital signs and motor-cognitive development, after a minimum period of recovery.<sup>[11]</sup> The anesthetist or surgeon must be informed of any concerns regarding the patient, with a review conducted before discharge. Patients should be discharged at the discretion of the DCS senior nursing staff. All children undergoing DCS should have a responsible adult to escort them home and care for them in the first 48 h following anesthesia.<sup>[14]</sup>

The most common reasons for delayed/no discharge at our hospital include parental anxiety, nausea, vomiting, pain, bleeding, drowsiness, respiratory problems, and bradycardia. Overnight admission should be planned in advance for patients who could not be discharged according to the exclusion criteria.

DCS inclusion criteria have expanded to include more high-risk children (e.g., those with prematurity, obesity, and acute conditions presenting for urgent surgery) and those undergoing increasingly complex and prolonged surgical procedures.<sup>[9]</sup> These changes increase the risk of patient harm and the possibility of litigation. Studies have provided evidence for factors that increase the risk of complaints or litigation in anesthesia for DCS. Regional anesthesia is associated with relatively more litigation than general anesthesia despite the potential clinical benefits.<sup>[3]</sup> Ultimately, it is the surgeon’s responsibility to ensure that a child is sufficiently recovered to go home.<sup>[6]</sup> For more than a century, pediatric DCS has been carried out, and these routine operations are recognized as the best practice for several common pediatric surgical procedures. However, well-designed randomized trials are still needed.<sup>[15]</sup>

This review has been prepared according to the consultant surgeon-led and nurse-run DCS protocol of Dörtçelik Children’s Hospital and an extensive literature search.

## CONCLUSION

Discharge criteria for DCS patients should be considered on an individual basis and evaluated according to the hospital facilities, the experience of the team, and the person responsible for taking care of the patient at home; rigid criteria should not be applied. DCS is beneficial for children, their families, and health-care providers. Careful patient selection, preparation, and discharge minimize postoperative morbidity.

### Statement

**Peer-review:** Externally peer-reviewed.

**Conflict of Interest:** The author have no conflict of interest to declare.

**Financial Disclosure:** The author declared that this study has received no financial support.

## REFERENCES

- Morton NS, Raine PAM, editors. *Paediatric Day Case Surgery*. 1st ed. UK: Oxford University Press; 1994.
- Brennan LJ. Modern day-case anaesthesia for children. *Br J Anaesth* 1999;83:91–103.
- Pearson A, Cook T. Litigation and complaints associated with day-case anaesthesia. *BJA Education* 2017;9:289–94.
- Quemby D, Stocker ME. Day surgery development and practice: Key factors for a successful pathway. *Contin Educ Anaesth Crit Care Pain* 2014;14:256–61.
- Nishida T, Mihara T, Ka K. Predictors for incidence of increased time spent in hospital after ambulatory surgery in children: a retrospective cohort study. *J Anesth* 2018;32:98–103.
- Higson J, Bolland R. Paediatric discharge criteria lead to improved outcomes. *Nurs Times* 2001;97:30–1.
- Elebute O, Ademuyiwa A, Bode C, Idiomi-Thomas H. Pediatric day case surgical practice at a tertiary hospital in lagos: how have we fared? *Ann Med Health Sci Res* 2014;4:559–61.
- Ramanujam TM, Uma G, Usha V, Ramanathan S, Sujaritha R. Advantages and limitations of day surgery in children in a developing country. *Pediatr Surg Int* 1998;13:512–4.
- Colter P, Slinn S, Bowen L. Paediatric day case surgery. *Anaesth Intensive Care Med* 2022;23:264–9.
- Bailey CR, Ahuja M, Bartholomew K, Bew S, Forbes L, Lipp A, et al. Guidelines for day-case surgery 2019: Guidelines from the Association of Anaesthetists and the British Association of Day Surgery. *Anaesthesia* 2019;74:778–92.
- Johnson GG. Day care surgery for infants and children. *Can Anaesth Soc J* 1983;30:553–7.
- Royal College of Anaesthetists. Chapter 10: Guidelines for the Provision of Paediatric Anaesthesia Services 2023. Available at: <https://rcoa.ac.uk/gpas/chapter-10>. Accessed Mar 22, 2023.
- Uzair M, Wazir MK, Afridi RAK, Ghani F, Ishaq M, Hussain M. Paediatric day case surgery: 3 years experience at private medical centre. *KJMS* 2018;11:241–4.
- Royal College of Nursing. RCN: Day surgery for children and young people (14 October 2020). Available at: <https://www.pslhub.org/learn/patient-safety-in-health-and-care/high-risk-areas/paediatrics/rcn-day-surgery-for-children-and-young-people-14-october-2020-r3317/>. Accessed Mar 22, 2023.
- de Luca U, Mangia G, Tesoro S, Martino A, Sammartino M, Calisti A. Guidelines on pediatric day surgery of the Italian Societies of Pediatric Surgery (SICP) and Pediatric Anesthesiology (SARNePI). *Ital J Pediatr* 2018;44:35.
- ANZCA. PG29(A) Guideline for the provision of anaesthesia care to children 2020. Available at: <https://www.anzca.edu.au/resources/professional-documents/guidelines/ps29-guideline-for-the-provision-of-anaesthesia-ca>. Accessed Mar 22, 2023.
- Heikal S, Bowen L, Thomas M. Paediatric day-case surgery. *Anaesth Intensive Care Med* 2019;20:318–23.
- Glinge C, Rossetti S, Oestergaard LB, Stampe NK, Lynge TH, Skals R, et al. Risk of sudden infant death syndrome among siblings of children who died of sudden infant death syndrome in Denmark. *JAMA Netw Open* 2023;6:e2252724.
- Lorinc AN, Walters CB, Lovejoy HK, Crockett CJ, Reddy SK. Hot topics in safety for pediatric anesthesia. *Children (Basel)* 2020;7:242.
- Upadhyaya M, Lander A. Day-case surgery in children. *Surgery (Oxford)* 2013;31:101–46.
- Patil V, Brennan LJ. Day surgery for children. *Anaesth Intensive Care Med* 2007;8:176–9.
- Letts M, Davidson D, Splinter W, Conway P. Analysis of the efficacy of pediatric day surgery. *Can J Surg* 2001;44:193–8.
- Clark N, Langford R. Update in Anaesthesia. The preparation of children for surgery. Available at: <https://resources.wfsahq.org/wp-content/uploads/uia30-The-preparation-of-children-for-surgery.pdf>. Accessed Mar 22, 2023.
- Navaratnarajah J, Thomas ML. Day surgery for children. *Anaesth Int Care Med* 2013;14:232–6.
- Walther-Larsen S, Rasmussen LS. The former preterm infant and risk of post-operative apnoea: Recommendations for management. *Acta Anaesthesiol Scand* 2006;50:888–93.
- Long JB, Fiedorek MC, Oraedu O, Austin TM. Neonatal intensive care unit patients recovering in the post anesthesia care unit: An observational analysis of postextubation complications. *Paediatr Anaesth* 2019;29:1186–93.
- Evereth LL. How young is the youngest infant for outpatient surgery. In: Fleisher LA, editor. *Evidence-Based Practice of Anesthesiology*. 4th ed. Philadelphia: Elsevier; 2023. p.478–83.
- Bowen L, Thomas M. Paediatric day case surgery. *Anaesth Intensive Care Med* 2016;17:274–9.
- Taylor D, Thomas M. Day surgery for children. *Anaesth Intensive Care Med* 2010;11:210–3.
- Uffman JC, Kim SS, Quan LN, Shelton T, Beltran RJ, Jatana KR, et al. Adverse events in infants less than 6 months of age after ambulatory surgery and diagnostic imaging requiring anesthesia. *Pediatr Qual Saf* 2022;7:e574.
- Islam A, Firoz AZ. Intra-operative & post-operative complications in pediatric anesthesia-A prospective observation study. *EAS J Anesthesiol Crit Care* 2021;3:47–50.
- Shetty N, Sethi D. Paediatric anaesthesia for day surgery. *Anaesthesia Tutorial of the Week* 203. 1st November 2010. Available at: [https://e-safe-anaesthesia.org/e\\_library/08/Anaesthesia\\_for\\_paediatric\\_day\\_surgery\\_TOTW\\_203\\_2010.pdf](https://e-safe-anaesthesia.org/e_library/08/Anaesthesia_for_paediatric_day_surgery_TOTW_203_2010.pdf). Accessed Mar 22, 2023.
- The Royal Children's Hospital Melbourne. Day of Surgery Centre (DOSC) Criteria for Patient Discharge. Available at: [https://www.rch.org.au/upload-edfiles/main/content/daycentre/dsc\\_discharge\\_criteria.pdf](https://www.rch.org.au/upload-edfiles/main/content/daycentre/dsc_discharge_criteria.pdf). Accessed Mar 22, 2023.
- Royal College of Anaesthetists. Chapter 6: Guidelines for the Provision of Anaesthesia Services for Day Surgery 2021. Available at: <https://www.rcoa.ac.uk/gpas/chapter-6>. Accessed Mar 22, 2023.
- Moura LA, Pereira LV, Minamisava R, Borges NC, Castral TC, Souza LAF. Severe acute postoperative pain self-reported by children after ambulatory surgeries: A cohort study. *Rev Bras Enferm* 2021;74(Suppl 4):e20200151.
- Williams G. Perioperative Analgesic Pharmacology in Children. Available at: <https://resources.wfsahq.org/atotw/perioperative-analgesic-pharmacology-in-children>. Accessed Mar 22, 2023.
- Abebe MM, Arefayne NR, Temesgen MM, Admass BA. Evidence-based perioperative pain management protocol for day case surgery in a resource limited setting: Systematic review. *Ann Med Surg (Lond)* 2022;80:104322.
- Urits I, Orhurhu V, Jones MR, Adamian L, Borchart M, Galasso A, et al. Postoperative nausea and vomiting in paediatric anaesthesia. *Turk J Anaesthesiol Reanim* 2020;48:88–95.
- Choudhary J, Bano S, Ahmed M, Zaidi MN. A prospective study of postoperative vomiting in children undergoing different surgical procedures under general anaesthesia. *Indian J Anaesth* 2008;52:159–63.
- Gan TJ, Belani KG, Bergese S, Chung F, Diemunsch P, Habib AS, et al. Fourth consensus guidelines for the management of postoperative nausea and vomiting. *Anesth Analg* 2020;131:411–48. Erratum in: *Anesth Analg* 2020;131:e241.