22 Day case surgery

Admission and list planning

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Anaesthesia and surgery

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Do you live alone? Yes Is it laparoscopic or a airway surgery? Yes Carer at home or inpatient Yes Can you get someone? No Yes Inpatient Home TABLE 22.4 List planning. Operation with potentially Types of patients who might longer recovery times need longer recovery time Tonsillectomy Very elderly Knee replacement High BMI Hip replacement Complex laparoscopic cholecystectomy BMI, body mass index.

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In the UK the definition of day surgery is the admission of selected patients to hospital for a planned surgical procedure, returning home on the same day . ‘True day surgery’ patients are day case patients who require full operating theatre facilities and/or a general anaesthetic, and any day cases not included as outpatients or undergoing endoscopy . Surgery that requires a 23-hour stay , including an overnight stay , is not classed as day surgery . Day surgery o ff ers benefits for patients and hospitals. Patients often prefer to recover in the comfort of their own home, and day surgery may cause less disruption to their domestic situation. It also reduces their risk of a hospital- acquir ed infection. For the hospital, it can provide greater patient satisfaction and increase the number of inpatient beds available for patients who need to be cared for in hospital. Successful delivery of day surgery requires the day surgery service to be considered a priority by the hospital, with key enablers in all areas of the pathway providing e ff ective implementation, refinement and progression. T here must be a high-quality pathway (Figure 22.1) sta ff ed by experienced/ expert members of the multidisciplinary team with the equipment and resources they need. This will ensure that there is a well-prepared patient who is in receipt of high-quality day case anaesthesia and surgery and who subsequently has a safe and successful day case discharge.
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The expectation by the patient and healthcare team should be that the patient will be going home the same day . Therefore, unless there has been an unexpected anaesthetic or surgical issue the patient should routinely have a nurse-led discharge. Patients should meet any pre-agreed general criteria (Table 22.5) as well as any surgery-specific criteria prior to discharge. In general, there should be no time restriction except for certain procedures, e.g. patients should remain in hospital until 6 hours after tonsillectomy . /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF The patient should receive written and verbal postoperative instructions and a phone number to contact should they have a problem out of hours. This must be a phone with a suitable person to advise and not an answerphone. Take-home medications should provide adequate pain relief and may include an antiemetic. These should be prescribed when the patient is in theatre and pre-packs of common analgesics should be used to improve the e ffi ciency of prescribing and reduce delays to discharge . All day surgery patients should be telephoned the day after surgery to provide support and to check that they have no problems. This call can also be used to collect valuable audit data, which can be used to refine the day surgery pathway .

Vital signs stable for at least 1 hour Correct orientation as to time, place and person if appropriate Adequate pain control with supply of oral analgesia Understands how to use oral analgesia supplied Ability to dress and walk where appropriate Minimal nausea, vomiting or dizziness Has taken oral /f_l uids Minimal bleeding or wound drainage Has passed urine (if appropriate) Has a responsible adult to take them home Written and verbal instructions given about postoperative care Knows when to come back for follow-up (if appropriate) Emergency contact number supplied

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Many emergency surgical procedures are minor and non-life-threatening. Patients may be considered low priority for surgical intervention and can therefore end up waiting hours or days for a slot on the emergency theatre list, resulting in prolonged starvation times and inpatient stay . With appropriate planning and preparation these patients could have surgery performed as a day case. This has become reasonably commonplace in orthopaedics for many upper limb traumas and in gynaecology for the evacuation of retained products of conception (ERPC). It has also increasingly been recognised for many other surgical procedures, as listed in the BADS DOP (Table 22.6). For certain procedures that can wait more than 24 hours patients can follow an ‘elective pathway’. They can be swabbed and isolate as per current coronavirus 2019 (COVID-19) requirements and then attend via an ‘elective green pathway’. Alternatively , they can be discharged home and then return to an acute surgical admission area to be added to a suitable list or be first on the emergency list (priority slot) and discharged the same day . Contraindications to being discharged must be identified, e.g. systemic sepsis, unstable diabetes, major comorbidities, if parenteral pain relief is needed or if patients are deemed unsafe to mobilise.

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Introduction

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Learning objectives

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To understand: The key components of the day surgery pathway • Which surgical procedures can be done as day surgery • Patient selection and preparation for day surgery • Learning objectives

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With the developments of anaesthesia and surgery , there should be very few restrictions to patients having day surgery (Table 22.2). Every e ff ort should be made to optimise a patient’s health so that they can be treated as a day case. There should be no arbitrary cut-o ff s according to age, weight or criteria specified by the American Society of Anesthesiologists. A patient’s suitability for day surgery should be judged on their comorbidities and functional status. Older /uni25CF /uni25CF /uni25CF patients and patients with higher body mass index (BMI) benefit from awake surgery or short-acting anaesthetic agents with a good recovery profile. Diabetes Patients with diabetes are often better at managing their own diabetes than healthcare professionals. UK national guidance recommends that patients with well-controlled diabetes (haemoglobin A1c [HbA1c] <69 /uni00A0 mmol/mol) can be safely managed as a day case. Patients with poorly controlled diabe - tes have an increased risk of cardiovascular complications and poor wound healing. They should have their surgery delayed until their diabetes is well controlled. If surgery cannot wait or it is thought the underlying disorder (e.g. tooth infection) is causing the diabetes control to be disrupted then diabetic control should be optimised as much as possible prior to surgery . Epilepsy Patients with well-controlled epilepsy should not be excluded from day surgery . It is essential that normal medications are not missed. Poorly controlled epilepsy should be optimised prior to any elective surgery . Obesity Traditionally there has been caution treating patients who have a higher BMI as a day case. Guidance from the Association of Anaesthetists of Great Britain and Ireland/BADS in 2019 states that ‘even morbidly obese patients can be safely managed in expert hands, with appropriate resources’. Preoperative assessment of patients should routinely include STOP-BANG (Snoring, Tiredness, Observed apnoeas, Pressure [hypertension], Body mass index, Age, Neck circumference, Gender) to identify undiagnosed OSA (obstructive sleep apnoea). T he Society for Obesity and Bariatric Anaesthesia (SOBA) Guideline for Anaesthesia of the obese patient identifies a number of risk factors that may make day surgery unsuitable, e.g. poor functional capacity , oxygen saturation <94% on air, STOP-BANG ≥ 5 (Figure 22.2 ; see also tools.farmacologiaclinica.info, riskcalculator.facs. org/RiskCalculator and www .stopbang.ca). Obese patients considered suitable for day surgery should receive a short- acting anaesthetic, avoiding long-acting opiates, with allowance for the additional time that may be required anaesthetically , surgically and for recovery .

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With the developments of anaesthesia and surgery , there should be very few restrictions to patients having day surgery (Table 22.2). Every e ff ort should be made to optimise a patient’s health so that they can be treated as a day case. There should be no arbitrary cut-o ff s according to age, weight or criteria specified by the American Society of Anesthesiologists. A patient’s suitability for day surgery should be judged on their comorbidities and functional status. Older /uni25CF /uni25CF /uni25CF patients and patients with higher body mass index (BMI) benefit from awake surgery or short-acting anaesthetic agents with a good recovery profile. Diabetes Patients with diabetes are often better at managing their own diabetes than healthcare professionals. UK national guidance recommends that patients with well-controlled diabetes (haemoglobin A1c [HbA1c] <69 /uni00A0 mmol/mol) can be safely managed as a day case. Patients with poorly controlled diabe - tes have an increased risk of cardiovascular complications and poor wound healing. They should have their surgery delayed until their diabetes is well controlled. If surgery cannot wait or it is thought the underlying disorder (e.g. tooth infection) is causing the diabetes control to be disrupted then diabetic control should be optimised as much as possible prior to

surgery . Epilepsy Patients with well-controlled epilepsy should not be excluded from day surgery . It is essential that normal medications are not missed. Poorly controlled epilepsy should be optimised prior to any elective surgery . Obesity Traditionally there has been caution treating patients who have a higher BMI as a day case. Guidance from the Association of Anaesthetists of Great Britain and Ireland/BADS in 2019 states that ‘even morbidly obese patients can be safely managed in expert hands, with appropriate resources’. Preoperative assessment of patients should routinely include STOP-BANG (Snoring, Tiredness, Observed apnoeas, Pressure [hypertension], Body mass index, Age, Neck circumference, Gender) to identify undiagnosed OSA (obstructive sleep apnoea). T he Society for Obesity and Bariatric Anaesthesia (SOBA) Guideline for Anaesthesia of the obese patient identifies a number of risk factors that may make day surgery unsuitable, e.g. poor functional capacity , oxygen saturation <94% on air, STOP-BANG ≥ 5 (Figure 22.2 ; see also tools.farmacologiaclinica.info, riskcalculator.facs. org/RiskCalculator and www .stopbang.ca). Obese patients considered suitable for day surgery should receive a short- acting anaesthetic, avoiding long-acting opiates, with allowance for the additional time that may be required anaesthetically , surgically and for recovery .

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Preoperative assessment

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A key component to successful day surgery is a well-informed, well-prepared patient. It is essential that the day surgery message starts at the time of referral by the primary care doctor and continues throughout the pathway by all sta ff who the patient interacts with. /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF - /uni25CF /uni25CF Preoperative assessment should follow the same principles as for any other patient and should be nurse led (see Chapter 21). The anaesthetist should review the patient's notes where appropriate and the suitability of the patient for day case surgery should be discussed with the day surgery lead to optimise day case rates. Key preassessment considerations specific to day surgery include: /uni25CF Can surgery be delayed until the medical condition is optimised and then plan as a day case? /uni25CF Can social factors be addressed for the patient to become . a suitable day case?

Consider • Preoperative CPAP • Blood gases/sleep studies Yes • Echocardiogram • Cardiorespiratory referral • Experienced anaesthetist • Book HDU bed No • May be suitable for day case surgery TABLE 22.3 Bene /f_i ts of dedicated day surgery facilities. All members of the multidisciplinary team are focused on day surgery Nurses with expertise in day surgery Nurses not distracted by inpatients Activity can continue even during a time of pressures on inpatient beds Fewer cancellations because activity can continue even when there are pressures on inpatient beds Can be made a COVID secure area – protected from COVID- positive areas of hospital Higher chance of successful day case discharge Separation from inpatient activity and so patients are more likely to be motivated to get up and go home if they see this as the 'norm' Higher patient satisfaction Higher quality outcomes COVID, coronavirus disease.

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Surgical techniques have progressed significantly and now cause less physiological disruption and stress to patients; therefore, they have a lower postoperative complication profile and a faster recovery rate. The British Association of Day Surgery’s (BADS) Directory of Procedures (DOP) lists over 200 procedures that are now considered to be suitable as a day /uni00A0 case (Table 22.1). Traditionally day surgery was limited to cases that lasted less than 1 hour but surgical procedures lasting 3–4 hours are now being routinely performed as successful day cases. Day surgery surgical criteria include the follo wing: /uni25CF There must be a low risk of significant immediate postoperative complications, e.g. catastrophic bleeding or airway compromise. /uni25CF The patient should be able to eat and drink or take oral nutrition postoperatively . /uni25CF Postoperative pain needs to be managed by oral painkillers, which may be in conjunction with local anaesthetic infiltration or peripheral nerve block. /uni25CF The patient should be able to mobilise postoperatively with or without aid. If these criteria are met then the surgeon booking the procedure should add the patient to a day surgery pathway .

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Red /f_l ags • Poor functional capacity • Abnormal ECG • Uncontrolled BP , CCF or IHD • S O <94% on air p 2 • If bicarbonate >27, OHS likely • Previous DVT/PE • STOP-BANG ≥5 • OS-MRS >3 • Metabolic syndrome • High ACS NSQIP risk Figure 22.2 Society of Bariatric Anaesthesia (SOBA) red /f_l ags. BP , blood pressure; CCF , congestive cardiac failure; CPAP , continuous positive airway pressure; DVT, deep vein thrombosis; ECG, electrocardiogram; HDU, high-dependency unit; IHD, ischaemic heart disease; ACS NSQIP , American College of Surgeons National Surgical Quality Improvement Program; OHS, obesity hypoventilation syndrome; OS-MRS, obesity surgery mortality risk score; PE, pulmonary embolism; S O , oxygen saturation; STOP-BANG, Snoring ,Tiredness, Observed apnoeas, Pressure p 2 (hypertensive), Body mass index, Age, Neck circumference, Gender.

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