

بناهم خدایمی که در این مرد است



# بیہوشی در بیماران سرپایی

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متخصص بیہوشی



## • **Table 1 Benefits of ambulatory surgery**

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- Patient preference, especially children and elderly
- Lack of dependence on the availability of hospital beds
- Greater flexibility in scheduling operations
- Low morbidity and mortality
- Lower incidence of infection
- Lower incidence of respiratory complications
- Higher volume of patients (greater efficiency)
- Shorter surgical waiting lists
- Lower overall procedural costs
- Less preoperative testing and postoperative medication



Ambulatory surgery remains very popular with patients with infrequent rates of adverse events and complications.

One important component of success in ambulatory surgery and anesthesia is minimal postoperative nausea and vomiting.



## **Table 2 Common factors associated with nausea, vomiting, and retching during the perioperative period**

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### **Patient-Related Factors**

Age, gender, preexisting diseases (e.g., diabetes), history of motion sickness or postoperative nausea and vomiting, smoking history, and level of anxiety, as well as intercurrent illness (e.g., viral infection, pancreatic disease)

### **Anesthesia-related factors**

Premedication, opioid analgesics, induction and maintenance anesthetics, reversal (antagonist) drugs, gastric distention, inadequate hydration

### **Surgery-related factors**

Operative procedure, length of surgery, blood in the gastrointestinal tract, forcing oral intake, opioid analgesics, premature ambulation (postural hypotension), and pain



**Table 3 Operative procedures suitable for ambulatory surgery**

<b>Specialty</b>	<b>Types of Procedures</b>
<b>Dental</b>	Extraction, restoration, facial fractures
<b>Dermatology</b>	Excision of skin lesions
<b>General</b>	Biopsy, endoscopy, excision of masses, hemorrhoidectomy, herniorrhaphy, laparoscopic procedures, varicose vein surgery
<b>Gynecology</b>	Cone biopsy, dilatation and curettage, Hysteroscopy, laparoscopy, polypectomy, tubal ligation, vaginal hysterectomy
<b>Ophthalmology</b>	Cataract extraction, chalazion excision, strabismus repair, tonometry
<b>Orthopedic</b>	Anterior cruciate repair, arthroscopy, carpal tunnel release, closed reduction, manipulation under anesthesia
<b>Otolaryngology</b>	Adenoidectomy, laryngoscopy, mastoidectomy, myringotomy, polypectomy, rhinoplasty, tonsillectomy, tympanoplasty
<b>Pain clinic</b>	Chemical sympathectomy, epidural injection, nerve blocks
<b>Plastic surgery</b>	Basal cell cancer excision, cleft lip repair, liposuction, mammoplasty, otoplasty, scar revision, septorhinoplasty, skin graft
<b>Urology</b>	Bladder surgery, circumcision, cystoscopy, lithotripsy, orchiectomy, prostate biopsy, vasovasostomy



## Table 4 Laboratory test recommendations for outpatients scheduled to undergo ambulatory surgery procedures under general anesthesia

Age range	Men	women
<40	None	Pregnancy test*
40-49	Electrocardiogram	Hematocrit level, pregnancy test*
50-64	Electrocardiogram	Hemoglobin or hematocrit level, electrocardiogram
65-74	Hemoglobin or hematocrit level, electrocardiogram, serum urea nitrogen, glucose	Hemoglobin or hematocrit level, electrocardiogram, serum urea nitrogen, glucose
>75	Hemoglobin or hematocrit level, electrocardiogram, serum urea nitrogen, glucose, chest radiograph	Hemoglobin or hematocrit level, electrocardiogram, serum urea nitrogen, glucose, chest radiograph



Sedative techniques can facilitate a wide variety of procedures performed in the hospital, office, or remote settings. However, sedation is no safer than general anesthesia and requires the same standards of personnel, monitoring, and perioperative care as for patients undergoing general or regional anesthesia.



## Table 5 Use of anxiolytic-sedative drugs for outpatient premedication

	Dosage range	onset (min)	key point
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### Benzodiazepines

Midazolam	7.5-15 mg PO	15-30	large first-pass effect
	5-7 mg IM	15-30	water soluble, nonirritating
	1-2 mg IV	1.5-3	rapid onset, excellent amnesia
Diazepam	5-10 mg PO	45-90	Long-acting metabolites
Temazepam	15-30 mg PO	15-40	Comparable anxiolysis to midazolam
Triazolam	0.125-0.25 mg PO	15-30	Prominent sedation
Lorazepam	1-2 mg PO	45-90	Prolonged amnestic effect

### $\alpha_2$ -Adrenergic Agonists

Clonidine	0.1-0.3 mg PO	45-60	Prolonged sedative effect
Dexmedetomidine	50-70 $\mu$ g IM	20-60	Bradycardia and hypotension
	50 $\mu$ g IV	5-30	reduced anesthetic/analgesic requirements



**Table 6 Comparison of currently available intravenous anesthetics for use during ambulatory anesthesia**

	<b>Dose (mg/kg)</b>	<b>Onset of Action</b>	<b>Recovery Profile</b>	<b>Side Effects</b>
Thiopental	<b>3-6</b>	Rapid	Intermediate	Drowsiness (“hangover”)
Methohexital	<b>1.5-3</b>	Rapid	Rapid	Pain, excitatory activity
Etomidate	<b>0.15-0.3</b>	Rapid	Intermediate	Pain, myoclonus, emesis
Ketamine	<b>0.75-1.5</b>	Immediate	Intermediate	Psychomimetic reaction, cardiovascular stimulation
Midazolam	<b>0.1-0.2</b>	Slow	Slow	Drowsiness, amnesia
Propofol	<b>1.5-2.5</b>	Rapid	Rapid	Pain on injection, cardiovascular depression



## Table 7 Complications of sedation in infertility treatment procedure

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### Apnea

- overdose of anesthetic drugs
- old age
- lung diseases
- hypo metabolic diseases (hypothyroidism)

### Treatment

- Ventilation by face mask with 100% O<sub>2</sub>
- If no response or no ventilation with mask: Intubation

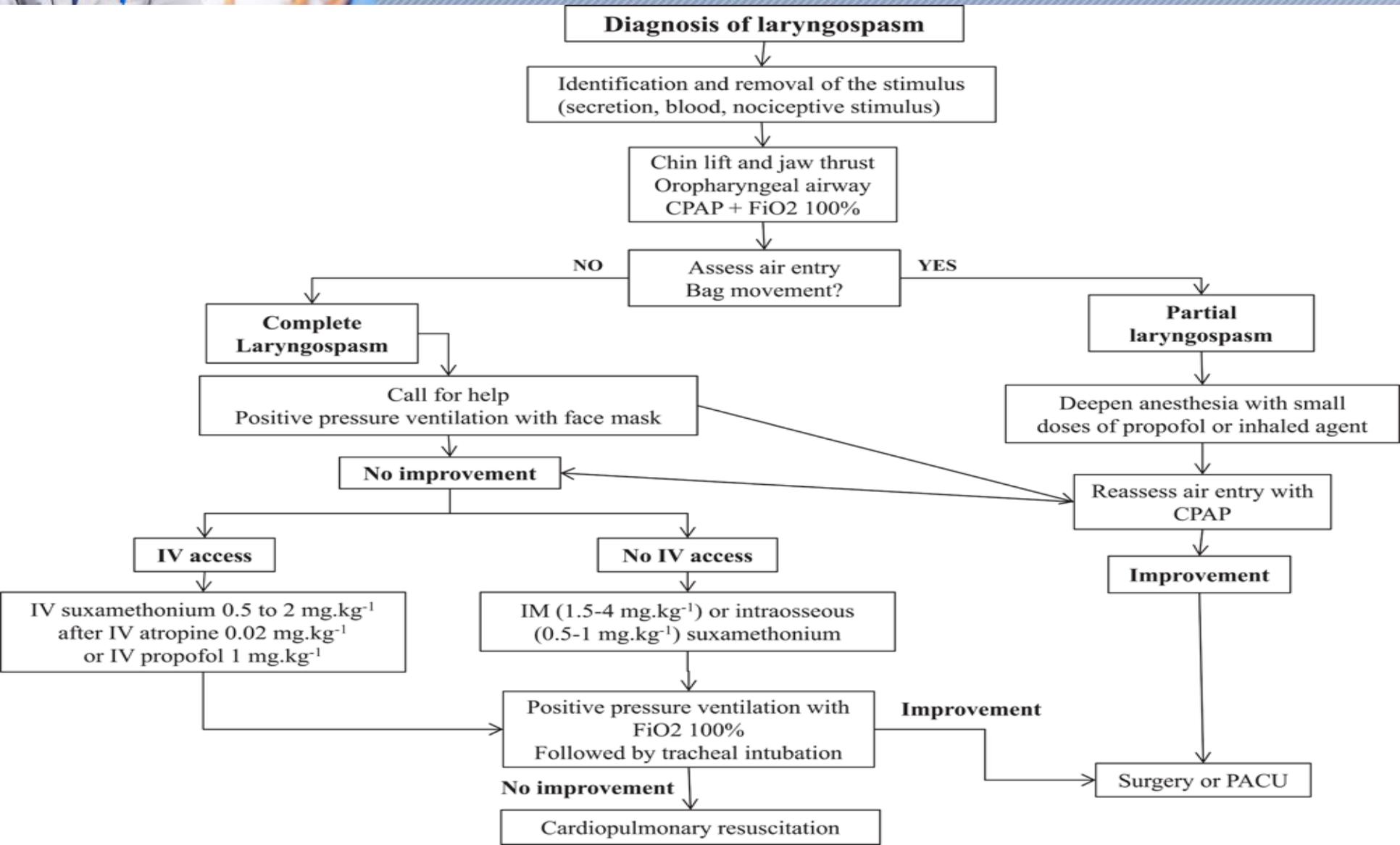
### Aspiration

common in patients with:

- Achalasia
- Obstruction
- incomplete NPO

**Treatment:** intubation and suction the trachea

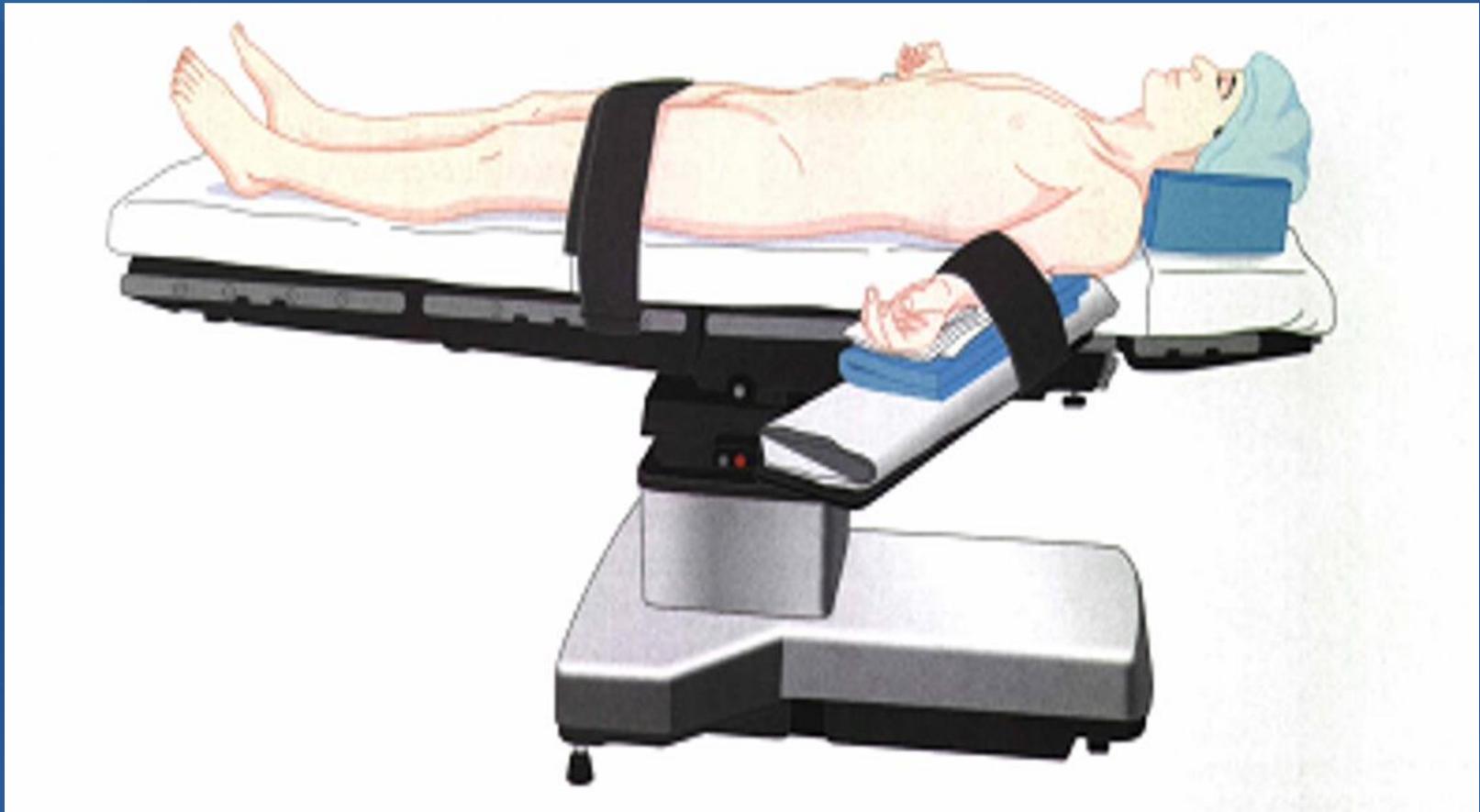
### Laryngospasm





## Patient positioning

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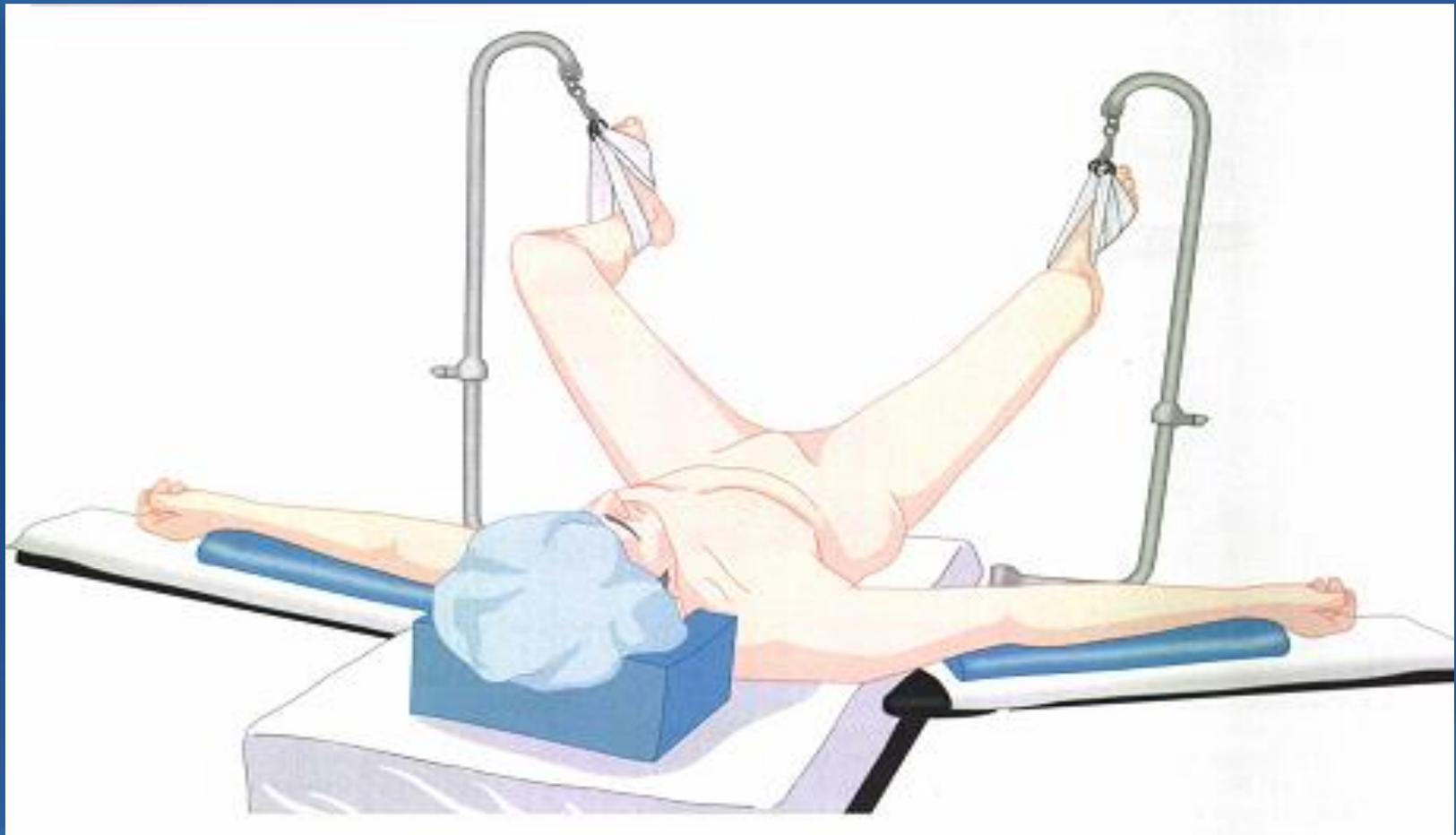
## Patient positioning

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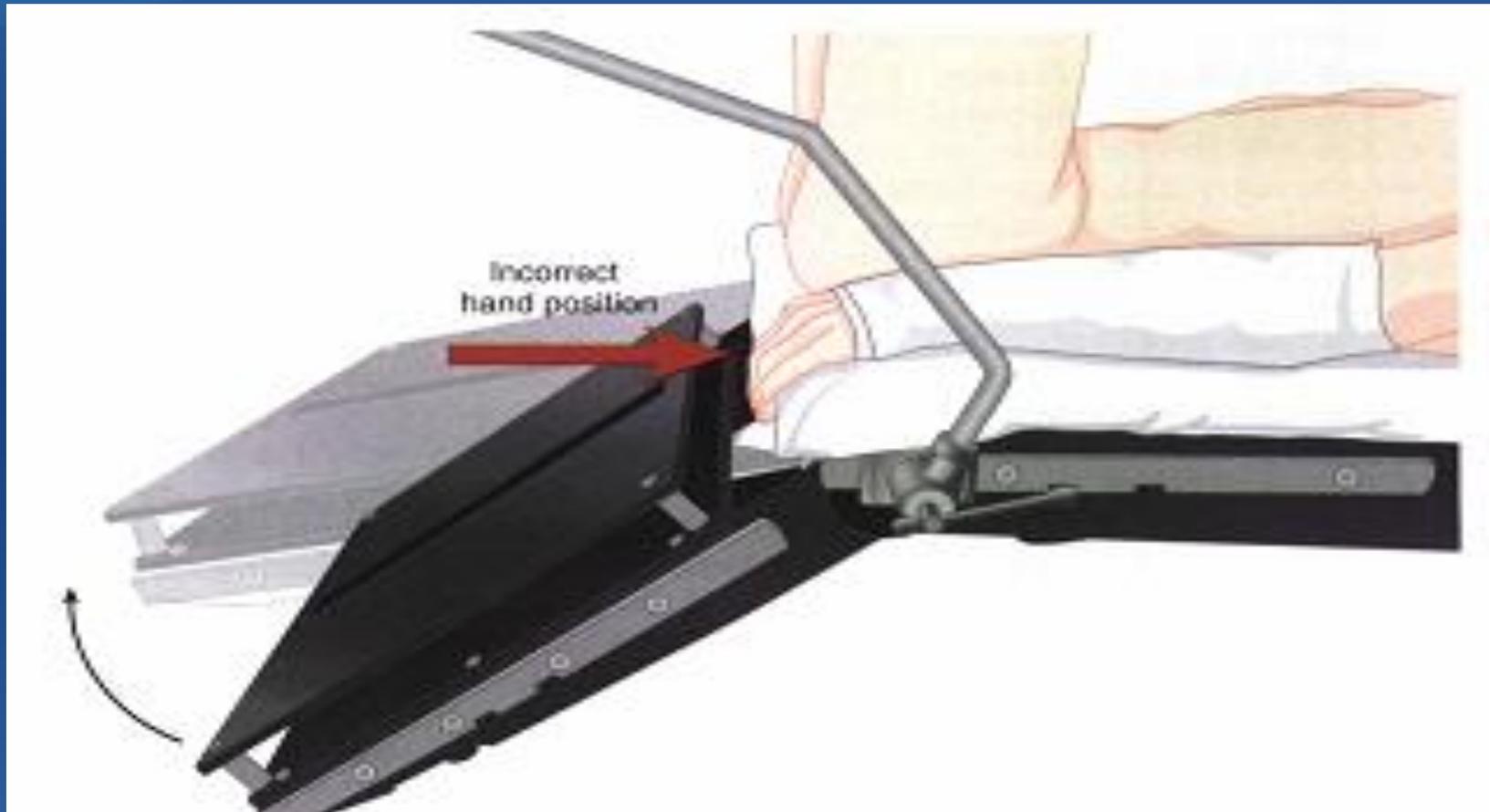


## Patient positioning



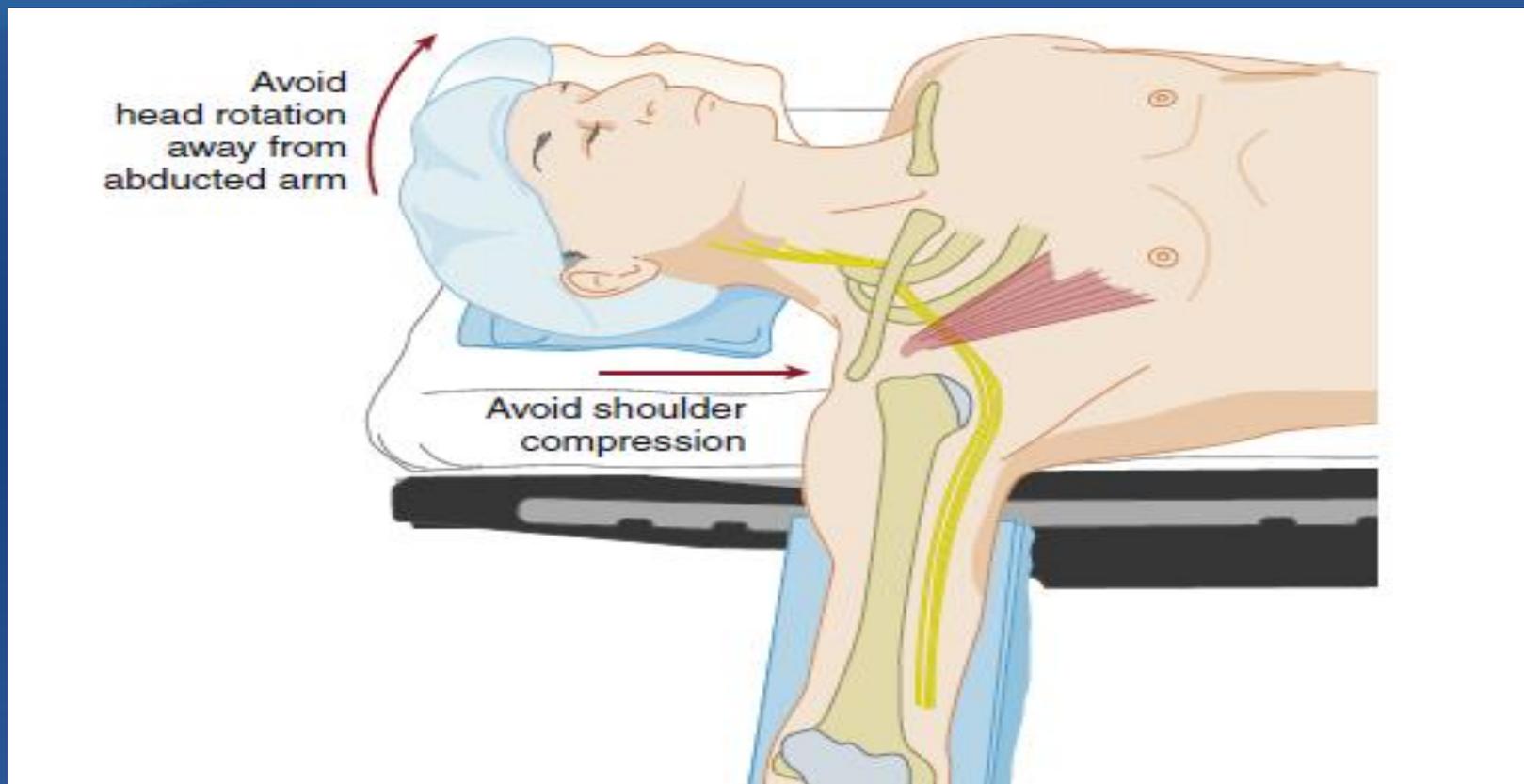


## Patient positioning





## Patient positioning





## Patient positioning

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## **Table 8 Criteria for facility discharge at the Brigham and women's Hospital, Boston, Massachusetts**

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Alert and oriented to time and place

Stable vital signs

Pain controlled by oral analgesia

Nausea or emesis mild, if present

No unexpected bleeding from operative site

Able to walk without dizziness

Has been given discharge instructions and prescriptions

Accepts readiness for discharge

Adult present to accompany patient home

با آرزوی تندرستی  
برای همگی شما  
گرانقدران

