

How to Assess a Patient Planned for Daycare Eye Surgery

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Introduction

Daycare ophthalmic surgery has become an integral component of modern eye care, offering improved efficiency, patient comfort, and optimal utilization of healthcare resources. As the scope of ophthalmic procedures performed on a same-day basis continues to expand, ensuring patient safety has become increasingly important. A structured and comprehensive preoperative assessment is essential for appropriate patient selection, anticipation of perioperative risks, and preparedness for emergencies, thereby minimizing unplanned admissions and adverse outcomes [1].

Objectives of Preoperative Assessment

The primary objective of preoperative assessment in daycare eye surgery is to determine whether a patient can safely undergo the planned procedure and anesthesia and be discharged on the same day without increased risk. This process involves evaluating systemic health, ophthalmic factors, anesthetic fitness, and social support systems. Standardized assessment protocols reduce variability in decision-making and enhance patient safety [2].

Medical History and Systemic Evaluation

A detailed medical history forms the foundation of preoperative assessment. Particular emphasis should be placed on identifying systemic comorbidities such as cardiovascular disease, hypertension, diabetes mellitus, respiratory disorders, neurological conditions, renal impairment, and hepatic dysfunction. The stability and control of these conditions are more relevant than their mere presence. Patients with well-controlled chronic illnesses are generally suitable for daycare surgery, whereas those with recent exacerbations or unstable disease may require postponement or inpatient management [3]. A history of prior anesthesia-related complications and current functional capacity should also be carefully documented.

Medication Review and Allergy Assessment

Medication review is a critical component of preoperative evaluation. Regular medications, including antihypertensives, antidiabetic agents, antiplatelet drugs, and anticoagulants, must be reviewed to anticipate perioperative implications. Known drug allergies, particularly to local anesthetics, antibiotics, and antiseptic agents, should be clearly documented. Appropriate perioperative medication planning helps reduce the risk of preventable adverse events and contributes significantly to safe daycare surgery [4].

Physical Examination and Vital Parameters

Physical examination should be focused and clinically relevant. Assessment of vital signs, including blood pressure, heart rate, and oxygen saturation, is mandatory. Cardiovascular and respiratory examinations are essential to identify undiagnosed or poorly controlled disease. Airway evaluation is particularly important in patients planned for sedation or general

anesthesia. Any abnormal findings should prompt further evaluation rather than being overlooked because of the perceived minor nature of ophthalmic procedures [5].

Ophthalmic Assessment and Surgical Factors

In addition to routine ocular evaluation, ophthalmic assessment should consider factors that may influence systemic stress during surgery. Anticipated surgical duration, patient cooperation, pain levels, and procedural complexity are important determinants of perioperative risk. Prolonged or technically demanding procedures may not be suitable for certain high-risk patients in a daycare setting, even when the surgery itself is ophthalmic in nature [6].

Preoperative Investigations

The use of preoperative investigations in daycare eye surgery should be rational and evidence based. Routine testing in asymptomatic patients has not been shown to improve surgical outcomes and may increase cost and delay [7]. Investigations should therefore be individualized based on age, systemic comorbidities, and clinical findings. Commonly indicated tests include blood glucose estimation in diabetic patients and electrocardiography in elderly patients or those with known cardiovascular disease.

Anesthesia Fitness and Risk Stratification

Assessment of anesthesia fitness is a crucial step in determining suitability for daycare surgery. The American Society of Anesthesiologists Physical Status classification provides a standardized method of risk stratification. Patients classified as ASA physical status I and II are generally ideal candidates for daycare surgery. Selected stable ASA III patients may be considered after anesthesiology consultation, whereas patients with unstable systemic disease are better managed in an inpatient setting [8]. Close coordination between the ophthalmologist and anesthesiology team is essential in high-risk cases.

Social and Logistical Considerations

Non-medical factors play an important role in the success of daycare surgery. The availability of a responsible attendant, the patient's ability to comprehend and comply with postoperative instructions, proximity to medical facilities, and access to emergency care must be assessed. Failure to consider these factors may result in avoidable postoperative complications and unplanned hospital admissions [9].

Institutional Preparedness and Emergency Readiness

Clearance for daycare surgery assumes that the surgical facility is adequately prepared to manage emergencies. This includes the availability of trained personnel, resuscitation equipment, essential emergency drugs, and well-defined escalation protocols. Preoperative assessment should therefore be viewed as an interaction between patient fitness and system preparedness rather than patient factors alone [10].

Documentation and Informed Consent

Comprehensive documentation is an integral part of preoperative assessment. Medical fitness, anesthesia plan, identified risks, and the possibility of conversion to inpatient care should be clearly recorded. Informed consent should reflect a realistic discussion of risks and expectations. Proper documentation facilitates continuity of care and provides medico-legal protection [11].

Conclusion

Assessment of a patient planned for daycare eye surgery is a critical determinant of surgical safety and outcomes. A structured approach encompassing medical, ophthalmic, anesthetic, and social considerations enables appropriate patient selection and minimizes perioperative emergencies. When supported by robust institutional preparedness, daycare ophthalmic surgery can be delivered safely and effectively, fulfilling its role in modern ophthalmic practice.

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IC288 - Respond Right: Emergency Protocols in Ophthalmic Practice - Standards & Strategies for best outcomes

Topic: Equipment and training required for emergencies and code blue drill

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For an **Eye Hospital (Ophthalmic OT / Day-Care Surgery Centre)**, emergency preparedness must comply with standards such as those of the National Accreditation Board for Hospitals & Healthcare Providers (NABH)

Below is a **practical, NABH-aligned checklist** for Equipment and Training required for Code Blue and emergency drills in Eye Hospitals.

1. Essential Emergency Equipment (Crash Cart Setup)

Standards require **immediate availability of resuscitation equipment and drugs** in ophthalmic surgical areas

A. Core Resuscitation Equipment

- Defibrillator (AED or Manual)
- Oxygen cylinder with flowmeter
- Suction machine
- Ambu bag (adult ± pediatric)
- CPR backboard
- Laryngoscope + ET tubes
- Airways (OPA/NPA)
- IV cannulas, fluids, IV sets
- Emergency drug tray (as per ACLS algorithms)
- BP apparatus + Stethoscope
- Multiparameter monitor (ECG, SpO₂, NIBP)

Crash carts must be fully equipped and checked regularly
SAED/AED availability and staff training are emphasized in Code Blue implementation guidance

2. Specialty-Specific Requirements for Eye Hospitals

Even though most ophthalmic surgeries use **local anesthesia**, emergency preparedness is mandatory.

Guidance for ophthalmic anesthesia services requires:

- Immediate access to resuscitation trolley
- Airway and IV access equipment

Additional Eye-Specific Considerations

- Management of:
 - Vasovagal syncope
 - Anaphylaxis
 - Local anesthetic toxicity
 - Cardiac arrest
 - Malignant Hyperthermia (if GA cases done)
 - If pediatric cases are performed → Pediatric airway + drugs required
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3. Code Blue Team Structure (NABH Perspective)

NABH requires:

- Designated Code Blue Team
- Clear role allocation
- Regular mock drills
- 100% BLS training; ACLS for responders

Typical Code Blue Team:

- Physician / Anesthesia doctor
- ACLS-certified nurse

- Technician with crash cart
- Security/support
- Documentation nurse

Emergency codes are hospital-wide and standardized under NABH systems

4. Mandatory Training Requirements

According to ASC and ophthalmic guidance:

✓ Basic Life Support (BLS)

All clinical staff must be BLS trained

✓ Advanced Cardiac Life Support (ACLS)

At least one ACLS-trained RN present when patients are in the facility

✓ Pediatric Advanced Life Support (PALS)

Required when pediatric patients are treated

✓ Annual Mock Drills

- Code Blue drill – minimum annually
 - Malignant Hyperthermia drill if GA cases done
 - NABH mandates regular mock drills
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5. How to Conduct a Code Blue Drill in an Eye Hospital

Step 1 – Activation

- Announce "Code Blue – OT / Ward / OPD"
- Record response time

Step 2 – First Responder

- Start BLS immediately
- Bring crash cart

Step 3 – Team Arrival

- ACLS protocol
- Assign roles:
 - Airway
 - Compressions
 - Drugs
 - Documentation
 - Timekeeper

Step 4 – Debrief

- What went well?
- Equipment gaps?
- Time to first shock?
- Documentation audit

NABH encourages digital tracking of emergency codes and response systems

6. Documentation Required for NABH Compliance

- Code Blue policy
- Crash cart checklist (daily sign-off)
- Drug expiry log
- Mock drill attendance sheet
- Drill evaluation report
- Corrective action plan

Recent enforcement shows increasing focus on NABH compliance for empanelment and quality standards

7. Minimum Setup for a Small Standalone Eye Hospital (No GA Cases)

If only local anesthesia cataract surgeries are done:

1. AED
 2. Oxygen + Ambu bag
 3. Suction
 4. Emergency drugs (Adrenaline, Atropine, etc.)
 5. IV fluids
 6. BLS-trained staff
 7. Tie-up hospital for transfer
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8. Practical Audit Checklist

Area	Check
Crash Cart	Fully stocked & sealed
AED	Battery & pads checked
Oxygen	Cylinder pressure adequate
Drugs	Not expired
Staff	BLS valid
ACLS	At least one on duty
Drill	Conducted in last 12 months
Transfer Policy Documented	

Final Summary

- Maintain a fully equipped crash cart
- Ensure 100% BLS certification
- Conduct 6-monthly mock drills (best practice)
- Document everything

Respond Right: Emergency Protocols in Ophthalmic Practice

Managing Public, Press and Police During Medical Emergencies

A Crisis Management Framework for Eye Care Practitioners

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Abstract

When a medical emergency or adverse outcome occurs in an eye hospital, the clinical management of the patient is only one dimension of the crisis. Within minutes, a secondary crisis unfolds involving the public (aggrieved relatives and bystanders), the press (traditional and social media), and the police (law enforcement and regulatory authorities) — the “PPP” triad. The manner in which this triad is managed in the critical first hours often determines the long-term impact on the hospital’s reputation, the treating doctor’s career, and the institution’s legal exposure. This review article provides a structured crisis management framework for ophthalmologists and eye hospital administrators, covering the timeline of crisis escalation, the immediate response protocol for the first 60 minutes, communication strategies (what to say and what never to say) for family, police, and media, the importance of contemporaneous documentation as a legal shield, and the establishment of a pre-designated crisis management team. The aim is to equip practitioners with practical, actionable strategies that can be implemented immediately, converting a potential catastrophe into a managed event.

Keywords: Crisis management, medical emergency, media management, medico-legal, hospital communication, public relations, police interaction, eye hospital, ophthalmology, adverse events

1. Introduction: The PPP Crisis

This article addresses a critical but often neglected dimension: the management of the Public, Press, and Police (PPP) during and after a medical emergency or adverse outcome.

The timeline of crisis escalation is remarkably rapid and predictable. Within 30 minutes of a serious emergency, a crowd gathers and photographs begin circulating on social media. Within 2 hours, media representatives arrive and police complaints may be filed. Within 24 hours, the hospital’s reputation is at stake and legal notices may be served. Despite this predictable trajectory, the vast majority of eye hospitals and individual practitioners have no crisis management plan in place,

leaving them to improvise under extreme emotional pressure — a recipe for compounding the original crisis.

2. Common Mistakes That Worsen the Crisis

Before outlining the correct approach, it is instructive to identify the errors that most frequently convert a manageable adverse event into an institutional catastrophe. These include: defensive or aggressive responses to distraught relatives, which escalate conflict rather than contain it; the treating doctor disappearing from the scene, which is invariably interpreted as an admission of guilt; multiple members of the hospital staff offering conflicting versions of events to family members, media, or authorities; premature or speculative communication about the cause of the adverse event; and a confrontational stance with police or regulatory authorities.

Each of these errors stems from a common root cause: the absence of a pre-determined, rehearsed crisis response protocol. The strategies outlined below are designed to replace improvisation with preparedness.

3. The Immediate Response: First 60 Minutes Protocol

3.1 Phase 1: Clinical Response (0–10 Minutes)

During the first 10 minutes, the clinical priority remains paramount. Resuscitation efforts must continue unabated. Simultaneously, the crisis response team should be activated and the area cleared of non-essential staff and bystanders. One senior doctor must be designated as the sole spokesperson — a critical decision that prevents contradictory communications. All staff present should begin documenting their observations contemporaneously, as these records will form the basis of the legal defence.

3.2 Phase 2: Family Management (10–30 Minutes)

The management of the patient's family during this period is arguably the most consequential determinant of how the crisis will unfold. A separate, private space should be arranged for relatives, away from the clinical area and from other patients and their families. The designated spokesperson should explain the situation with honesty and compassion, avoiding both defensive posturing and premature admissions. Blame and speculation must be scrupulously avoided. All communication with the family must be documented, including who communicated, what was said, and the family's response. Where available, a counsellor or trained family liaison officer should provide emotional support.

3.3 Phase 3: External Management (30–60 Minutes)

By the 30-minute mark, attention must turn to managing external stakeholders. A brief written statement should be prepared for potential media enquiries, structured around the template provided in Section 5 below. Security should control entry to the facility, preventing unauthorised access to clinical areas. No individual staff member should give media interviews. The hospital's legal advisor should be contacted. The local branch of the Indian Medical Association (IMA) or relevant Hospital Association should be informed, as they can provide institutional support and legal guidance.

4. Communication Strategy: What to Say and What Never to Say

Communication during a crisis must be deliberate, consistent, and compassionate. The following guidelines should be internalised by every member of the crisis team.

4.1 Communication with the Family

Appropriate Statements	Statements to Avoid
"We did everything possible."	"It was unexpected."
"A full investigation will be conducted."	"These things happen."
"We share your grief."	"It's God's will."
"All records will be made available."	"Sign this form now."

4.2 Communication with the Police

When police arrive, the hospital must convey complete cooperation. Appropriate responses include: "Complete cooperation is assured," "All documents are being prepared," and "Our legal advisor is being arranged to be present." Confrontational statements such as "You have no jurisdiction," "Come back with a warrant," or "Talk to my lawyer" must be absolutely avoided — they transform a routine enquiry into an adversarial investigation. The hospital should request that queries be submitted in writing and ensure that a legal advisor is present when formal statements are recorded.

4.3 Communication with the Media

Media communication should be restricted exclusively to written statements issued by the designated spokesperson. The following template provides a structured framework:

MEDIA STATEMENT TEMPLATE:

"A medical emergency occurred at [time] on [date]. Our team responded immediately with full resuscitation protocols. Despite all efforts, the outcome was unfortunate. We deeply sympathize with the family. A detailed investigation is underway. Complete cooperation is being extended to all authorities. Further updates will follow. We request the media to respect the family's privacy during this difficult time."

Under no circumstances should individual interviews be granted, speculation about the cause of death or adverse outcome be offered, blame be directed at any individual or system, or technical medical details be shared with media representatives.

5. Documentation: Your Legal Shield

In medico-legal proceedings, the quality and completeness of contemporaneous documentation is the single most important determinant of outcome. The documentation framework comprises three tiers.

5.1 Clinical Documentation (Contemporaneous)

This must capture the exact timeline from event onset through recognition, interventions, and outcomes. Vital signs should be recorded every 2–5 minutes during the emergency. All drugs administered must be documented with name, dose, route, time, and the identity of the person who administered them. The record must clearly state who did what and when, based on observed facts and not on assumptions.

5.2 Incident Report (Within 2 Hours)

A formal incident report should be completed within 2 hours of the event. It should contain objective facts only, with no blame attribution or speculation about causation. The report should include patient demographics, the procedure that was planned, consent status, a step-by-step event sequence, the names of witnesses present, a log of all communication with the family, and a record of which authorities were notified and when.

5.3 Evidence Preservation

All medical records (both paper and electronic) must be secured immediately and placed beyond the possibility of inadvertent or deliberate alteration. Equipment and drugs used during the incident should be preserved, labelled, and sealed. Photographs of the clinical setup and scene should be taken where relevant. CCTV footage, if available, should be preserved. The chain of custody for all evidence must be maintained.

6. The Crisis Management Team: Structure and Roles

A pre-designated crisis management team is essential. The team must be constituted, its members trained, and their roles rehearsed before any crisis occurs. The structure comprises a core team and a support team.

No.	Role	Designated Person	Responsibility
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1	Incident Commander	Medical Director / Senior Partner	Overall coordination and decision-making
2	Clinical Lead	Treating doctor + backup physician	Continued patient management and clinical decisions
3	Family Liaison	Counsellor / Senior nurse	All communication with relatives; emotional support
4	Documentation Officer	Designated staff member	Real-time recording of all events and communications
5	Media Coordinator	Administrator / Designated spokesperson	Single point of contact for media; written statements only
6	Legal Advisor	Retainer lawyer / IMA panel advocate	On-call 24/7; present for police statements
7	Security Officer	Security in-charge	Crowd control; entry restriction; evidence protection
8	Administrative Support	Office manager	Logistics, phone calls, document coordination

7. Preparedness Checklist

Every eye hospital should verify that the following elements are in place at all times: crisis team members' names, roles, and contact numbers are displayed prominently; a media statement template in fill-in-the-blanks format is readily available; a legal advisor is accessible 24/7; the IMA or Hospital Association emergency helpline number is saved in key personnel's phones; the incident report format is readily accessible and understood by all staff; and a designated family communication room has been identified within the facility.

Quarterly crisis simulation drills should be conducted, incorporating not only clinical emergency scenarios but also the PPP management component. Post-drill debriefing should identify gaps and lead to protocol refinement.

8. Key Takeaways

The six guiding principles of crisis management in ophthalmic practice can be summarised as follows. First, **Sense**: the ABCDE assessment framework prevents 80% of avoidable deaths. Second, **Save**: the first 5 minutes constitute the golden period for intervention. Third, **Document**: contemporaneous records are the strongest legal protection available. Fourth, **One Voice**: a single designated spokesperson prevents contradictory communications that undermine credibility. Fifth, **Compassion First**: empathy and genuine concern defuse the majority of conflicts with relatives. Sixth, **Preparedness**: a crisis team and regular drills must be established before the emergency occurs, not improvised during it.

9. Conclusion

The clinical management of a medical emergency and the management of the secondary crisis involving the public, press, and police are two inseparable dimensions of the same event. Excellence in one without preparedness in the other leaves the practitioner and the institution critically vulnerable. The frameworks presented in this two-part series — the ABCDE approach and red flag recognition for clinical management, and the PPP crisis management protocol for external management — are designed to be implementable in any eye care setting, from a solo practice to a large hospital. The investment required is modest: primarily in training, documentation systems, and team building. The return on this investment — in lives saved, reputations preserved, and legal exposure minimised — is incalculable.

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Respond Right: Emergency Protocols in Ophthalmic Practice

Sensing and Saving the Sinking Patient

A Practical Guide for the Practising Ophthalmologist

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Abstract

Medical emergencies in eye care settings, though infrequent, carry a disproportionately high risk of morbidity and mortality owing to the limited resuscitative infrastructure typically available in standalone ophthalmic facilities. Every eye centre will, at some point, encounter a medical emergency — be it a cardiac arrest during cataract surgery, anaphylaxis following fluorescein injection, or a vasovagal syncope in the outpatient department. Most fatalities in such settings occur within the first 10 minutes, underscoring that recognition is more critical than treatment. This review provides a structured, protocol-driven approach to the identification and management of medical emergencies commonly encountered in ophthalmic practice. It covers the ABCDE systematic assessment framework, red flag recognition across cardiovascular, respiratory, neurological, and anaphylactic emergencies, and addresses eye surgery-specific emergencies including the oculocardiac reflex, local anaesthetic systemic toxicity, and peribulbar haemorrhage. The article also presents the essential emergency drug tray and equipment requirements for eye hospitals and emphasises that staff training is of greater value than equipment availability alone.

Keywords: Medical emergency, ophthalmic practice, ABCDE assessment, oculocardiac reflex, local anaesthetic toxicity, anaphylaxis, CPR, emergency protocols, eye hospital safety

1. Introduction

The ophthalmic surgical environment presents a unique paradox: while the procedures performed are among the most common and safest in all of surgery, the patient population served is disproportionately elderly, with a high prevalence of systemic comorbidities including diabetes mellitus, hypertension, coronary artery disease, and chronic obstructive pulmonary disease. This combination of a vulnerable patient population with a surgical setting that may lack the full complement of resuscitative infrastructure found in multispecialty hospitals creates a latent risk that every ophthalmologist must be prepared to address.

The critical reality is stark: in cardiac arrest, survival drops by approximately 10% with every minute that passes without cardiopulmonary resuscitation (CPR). In anaphylaxis, the window from onset to cardiac arrest can be as narrow as 5–15 minutes. The golden period for meaningful intervention

is the first 3–5 minutes — well before any external emergency medical service can arrive. It is therefore imperative that every member of the eye care team be trained in the early recognition of deteriorating patients and in the institution of immediate life-saving measures.

2. The ABCDE Framework: A Systematic Assessment Approach

The ABCDE approach provides a systematic, reproducible framework for the assessment and initial management of any acutely unwell patient. It ensures that the most life-threatening conditions are identified and treated first, in order of priority. This framework should be the foundation of emergency response training for all eye care staff.

2.1 Airway

Assessment involves three simultaneous actions: **look** for chest rise, **listen** for breath sounds, and **feel** for air movement. If the airway is compromised, immediate interventions include the head tilt–chin lift manoeuvre, removal of any visible obstruction, and insertion of an oropharyngeal airway if the patient is unconscious and tolerates the device.

2.2 Breathing

Breathing assessment requires evaluation of respiratory rate (normal 12–20/min), depth of respiration, and oxygen saturation (target >94%). If the respiratory rate falls below 8 per minute or oxygen saturation drops below 90%, high-flow oxygen at 15 L/min via a non-rebreather mask should be administered immediately, with bag-valve-mask ventilation prepared if needed.

2.3 Circulation

Circulatory assessment encompasses pulse rate and rhythm, blood pressure, capillary refill time (normal <2 seconds), and skin colour. If a pulse is absent, CPR must be commenced immediately. If hypotension is present, intravenous access should be secured and fluid resuscitation initiated.

2.4 Disability

Neurological assessment uses the AVPU scale: **A**lert, responsive to **V**oice, responsive to **P**ain, or **U**nresponsive. Pupillary responses and blood glucose should also be checked. An unconscious patient should be placed in the lateral (recovery) position to protect the airway. If blood glucose is below 70 mg/dL, glucose correction must be initiated promptly.

3. Red Flag Recognition: When to Activate the Emergency Protocol

Early recognition of deterioration is the single most important factor in saving lives during medical emergencies. The following red flags demand immediate action and should be familiar to every member of the eye care team.

System	Red Flags	Immediate Action
Cardiovascular	Chest pain/pressure/heaviness; Pulse absent, <40, or >120/min; BP <90 or >180 systolic; Severe sweating with nausea	Activate emergency protocol; Aspirin 300 mg chewed; High-flow oxygen; IV access
Respiratory	Respiratory rate <8 or >24/min; O ₂ saturation <90%; Severe breathlessness; Inability to complete sentences	High-flow O ₂ immediately (15 L/min); Prepare for airway support; Bag-valve-mask if rate <8/min
Neurological	Sudden confusion or disorientation; Unequal pupils; Seizures; Loss of consciousness	Protect airway (lateral position); Check blood glucose; Do not restrain during seizure; Call for help
Anaphylaxis	Sudden rash with breathing difficulty; Swelling of lips/tongue/throat; Hypotension with tachycardia; Onset after drug/dye injection	Adrenaline 0.5 mg IM immediately (anterolateral thigh); High-flow O ₂ ; IV fluids; Repeat adrenaline at 5 min if no response

4. Eye Surgery–Specific Emergencies

In addition to the general medical emergencies described above, ophthalmic practice presents several unique emergency situations that require specific knowledge and preparedness.

4.1 Oculocardiac Reflex (OCR)

The oculocardiac reflex is a trigemino-vagal reflex that can be triggered by pressure on the globe or traction on the extraocular muscles during surgery. It manifests as sudden bradycardia (heart rate falling below 50 bpm), sometimes accompanied by hypotension and arrhythmia. The incidence is particularly high in strabismus surgery but can occur during any procedure involving globe manipulation.

The immediate action upon recognition is to **stop all surgical manipulation**. In most instances, the reflex is self-limiting and the heart rate recovers within seconds of cessation of the stimulus. If bradycardia persists despite cessation of manipulation, intravenous atropine 0.6 mg should be administered and the anaesthetist informed immediately. Prophylactic atropine or glycopyrrolate may be considered in high-risk cases.

4.2 Local Anaesthetic Systemic Toxicity (LAST)

Local anaesthetic systemic toxicity is a potentially fatal complication of peribulbar and retrobulbar blocks. It can occur within seconds to minutes of injection and follows a characteristic progression: circumoral tingling and metallic taste are followed by seizures, and ultimately cardiovascular collapse and cardiac arrest if not promptly treated.

The management protocol requires immediate cessation of the injection, administration of 100% oxygen, and early use of intravenous lipid emulsion 20% at a dose of 1.5 mL/kg as a bolus. Seizures

should be controlled with midazolam 2–5 mg IV. Advanced life support should be initiated if cardiovascular collapse occurs. **Every eye centre performing regional anaesthesia must stock intralipid emulsion** — this is a life-saving intervention that is often unavailable in standalone eye hospitals.

4.3 Peribulbar Haemorrhage

Peribulbar haemorrhage following a regional block presents with rapid proptosis, a hard eye on palpation, and severe pain. The critical risk is retinal artery occlusion if the intraocular pressure (IOP) exceeds 40 mmHg. If vision is threatened by orbital compartment syndrome, an emergency lateral canthotomy with inferior cantholysis must be performed without delay to decompress the orbit.

5. Emergency Preparedness: The Essential Framework

5.1 The Emergency Drug Tray

Every eye hospital, regardless of size, must maintain a readily accessible emergency drug tray that is checked and restocked at regular intervals. The following medications represent the minimum emergency drug inventory:

Drug	Dose	Route	Indication
Adrenaline (1:1000)	0.5 mg (0.5 mL)	IM	Anaphylaxis
Atropine	0.6 mg	IV	Bradycardia / OCR
Hydrocortisone	200 mg	IV	Anaphylaxis (2nd line)
Chlorpheniramine	10 mg	IV/IM	Allergic reaction
Midazolam	2–5 mg	IV	Seizures
Salbutamol nebulisation	5 mg	Nebulised	Bronchospasm
Aspirin	300 mg	Oral (chewed)	Acute MI
Intralipid 20%	1.5 mL/kg bolus	IV	LAST
Normal saline	500 mL–1 L	IV	Fluid resuscitation
50% Dextrose	25–50 mL	IV	Hypoglycaemia

5.2 Essential Equipment

The minimum equipment requirement includes a pulse oximeter, blood pressure apparatus, stethoscope, bag-valve-mask (Ambu bag) with appropriate-sized masks, oropharyngeal airways (sizes 2, 3, and 4), oxygen cylinder with flowmeter and delivery devices, suction apparatus, intravenous cannulae and infusion sets, a glucometer, and an automated external defibrillator.

(AED) where feasible. A crash cart with these items should be accessible within 60 seconds from any patient care area.

5.3 Staff Training: The Most Critical Investment

The presentation emphasises a fundamental principle: **staff training is more important than equipment availability**. The most sophisticated defibrillator is useless if no one knows how to operate it. Every member of the eye care team — from the receptionist to the surgeon — should be trained in Basic Life Support (BLS). At least one doctor and one nurse per shift should be certified in Advanced Cardiac Life Support (ACLS). Mock emergency drills should be conducted quarterly, with debriefing and protocol refinement after each drill.

6. The Golden Period: Making the First Five Minutes Count

The concept of the “golden period” is central to emergency management in ophthalmic practice. Within the first 3–5 minutes, the following must be accomplished: recognition that a life-threatening emergency is occurring, activation of the emergency response (calling for help), commencement of appropriate immediate interventions (CPR, adrenaline, oxygen), and simultaneous arrangement for definitive care through activation of emergency medical services or transfer protocols.

This mandates that recognition skills be highly developed across all staff categories. A sinking patient does not always present with dramatic collapse — subtle signs such as increasing restlessness, diaphoresis, pallor, confusion, or a patient who “doesn’t look right” may be the only early warning signs. Empowering all staff to raise an alarm when they sense that something is wrong — even in the absence of objective parameters — can be life-saving.

7. Conclusion

Medical emergencies in ophthalmic practice are uncommon but not rare, and their outcome depends overwhelmingly on the preparedness of the facility and its staff. The ABCDE framework provides a structured, reproducible approach to the deteriorating patient. Red flag recognition enables early intervention during the golden period. Knowledge of eye surgery-specific emergencies such as the oculocardiac reflex, local anaesthetic toxicity, and peribulbar haemorrhage is essential for every ophthalmic surgeon and anaesthetist. Ultimately, the investment in regular staff training, mock drills, and maintenance of emergency equipment and drugs will determine whether a medical emergency in an eye hospital results in a “near miss” or a tragedy.

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