

¿Cuál es nuestro papel como Anestesiólogos en la Cirugía de la Catarata ?

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Tratamiento anestésico en quirófano

...

- Técnica anestésica
- Complicaciones sistémicas en CC
- Por anesthesiólogos?
- ¿Técnico o enfermera de anestesia?
- ¿Sólo oftalmólogo?

Evolución de las técnicas anestésicas en la C. de catarata

- Incremento en ALR desde 46% en 1991, 75%-86% en 1996-97 y 96% a partir de 2003-2006
- Disminución del uso de sedación desde 45% en 1991, 6% en 1996 y 1,4% a partir de 2006
- Las técnicas de ALR arrojan menor morbilidad



Morbilidad en la c. de catarata

- Encuesta (1999) ≈ 65.000 procedimientos
- Técnicas de anestesia locorregional
- Complicaciones quirúrgicas: 2,7%
- Médicas: 0,9% (HTA, Bradicardia, TSV, S. vasovagal, ataque pánico, inyección subaracnoidea, ...)

Adverse Intraoperative Medical Events and Their Association with Anesthesia Management Strategies in Cataract Surgery

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The Study of Medical Testing for Cataract Surgery Study Team

Objective: To compare adverse medical events by different anesthesia strategies for cataract surgery.

Design: Prospective cohort study.

Participants: Patients 50 years of age and older undergoing 19,250 cataract surgeries at nine centers in the United States and Canada between June 1995 and June 1997.

Intervention: Local anesthesia applied topically or by injection, with or without oral and intravenous sedatives, opioid analgesia, hypnotics, and diphenhydramine (Benadryl).

Main Outcome Measures: Intraoperative and postoperative adverse medical events.

Results: Twenty-six percent of surgeries were performed with topical anesthesia and the remainder with injection anesthesia. There was no increase in deaths and hospitalizations associated with any specific anesthesia strategy. No statistically significant difference was observed in the prevalence of intraoperative events between topical and injection anesthesia without intravenous sedatives (0.13% and 0.78%, respectively). The use of intravenous sedatives was associated with a significant increase in adverse events for topical (1.20%) and injection anesthesia (1.18%), relative to topical anesthesia without intravenous sedation. The use of short-acting hypnotic agents with injection anesthesia was also associated with a significant increase in adverse events when used alone (1.40%) or in combination with opiates (1.75%), sedatives (2.65%), and with the combination of opiates and sedatives (4.04%). These differences remained after adjusting for age, gender, duration of surgery, and American Society of Anesthesiologists risk class.

Conclusions: Adjuvant intravenous anesthetic agents used to decrease pain and alleviate anxiety are associated with increases in medical events. However, cataract surgery is a safe procedure with a low absolute risk of medical complications with either topical or injection anesthesia. Clinicians should weigh the risks and benefits of their use for individual patients. *Ophthalmology* 2001;108:1721-1726 © 2001 by the American Academy of Ophthalmology.

Serious complications of local anaesthesia for cataract surgery: a 1 year national survey in the United Kingdom

Tom Eke, John R Thompson

Br J Ophthalmol 2007;**91**:470–475. doi: 10.1136/bjo.2006.106005

- Encuesta sobre \approx 375.000 cirugías de cataratas
- 4,7% Anestesia General
- 92,1% ALR sin sedación
- 3,9% ALR con sedación
 - **Compl. Sistémicas (0-1,5/10.000)**
 - **T. retro y peribulbar (7 casos anestesia del SNC)**

ophthalmology 2007; 35: 589
2071.2007.01553.x

Monitored Anesthesia Care by Registered Respiratory Therapists during Cataract Surgery: An Update

Peter A. Zakrzewski, MD,¹ Alexander V. Banashkevich, BSc,¹ Tammy Friel, RRT,²
Rosa Braga-Mele, MD, FRCSC³

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Routine cataract surgery with
presence of an anaesthetist

Monitored Anesthesia Care by Registered Respiratory Therapists during Cataract Surgery: An Update

Ophthalmology 2010;117:897-902

Peter A. Zakrzewski, MD,¹ Alexander V. Banashkevich, BSc,¹ Tammy Friel, RRT,²
Rosa Braga-Mele, MD, FRCSC³

- Estudio prospectivo: 15.459 pacientes
 - Terapeutas respiratorios entrenados por S. anestesia
 - Anest Tópica + intracameral + sedación iv
- Definición precisa de cuando consultar con el anesthesiólogo, que está inmediatamente disponible
- Evalúan complicaciones graves y la necesidad de consultar con el anesthesiólogo
- Resultados:
 - No complicaciones graves
 - Consulta anesthesiólogo en 2,6%: (1,7 % preop; 0,91% intraop; 0,03 PO)
- Los autores revisan estudios que muestran la seguridad del procedimiento
 - Complicaciones graves 0,02-0,05% (incluyendo datos antiguos y AG)
 - Mortalidad: 0,01% (6 casos de 55.290 cirugías)

Outpatient Cataract Surgery

Incident and Procedural Risk Analysis Do Not Support Current Clinical Ophthalmology Guidelines

Ophthalmology 2015;122:281-287 © 2015

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Floor S. Tukkers, MD,² Gerrit J. Noordergraaf, MD, PhD¹

- Estudio retrospectivo monocéntrico
- Unidad oftalmología separada del hospital (2010)
- Paciente contacta en 4 ocasiones (precirugía, cirugía y 2 seguimiento PO)
- No test preoperatorios, mantenimiento tto medicamentoso (AAP y ACO) y la ingesta oral
- En la unidad 2 tomas de constantes vitales: TA y SpO2 en área de preparación y en quirófano SpO2. No vía periférica. Anestesia tópica
- Sólo oftalmólogo en Quirófano + dos enfermeras
- Política del hospital en seguridad: todo personal está entrenado en soporte vital, “llamada precoz”
- Equipo médico de emergencias (contactar respuesta en 3-5 min)
- OBJETIVO: **Evaluar la seguridad del sistema**

Resultados

- 7.011 procedimientos (4.348 pacientes)
- 38 pacientes excluidos (quirófano estándar)
- Edad 72 años, comorbilidad 36%, 56% sobrepeso, 29% ASA III
- No complicaciones que causaron ingresos no previstos
- Equipo de emergencias en 3 pacientes en la unidad de oftalmología (0,04%)
- Ninguna actuación en Q.

Aeroplanes rarely crash nowadays, therefore they don't need pilots: anaesthesia, anaesthetics and cataract surgery

- Riesgo en la c. de catarata es su relativa seguridad
- Gran volumen de cirugía
- ↑ complicación potencialmente afectaría a muchos pacientes
- Cirugía con anestesia local vs. a. Subtenoniana (preferencia del paciente,)
- Anestesiólogo: practicaría bloqueo, facilitaría la eficiencia del quirófano, sedación, optimizaría medicamente al paciente, manejaría incidentes críticos
- **¿Volaría usted en un avión sin piloto?**

Variabilidad clínica en la cirugía de la catarata

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- Definir, consensuar, homogeneizar protocolos o guías de práctica clínica
- Liderado por las sociedades científicas implicadas
- Disponer de datos actuales para evaluar la evolución e implementación guías
- Realizar auditorias del proceso asistencial e instaurar acciones de mejora
- Investigación en resultados y complicaciones (oportunidad de mejora)
- Informar para sensibilizar a todos los implicados

Local anaesthesia for ophthalmic surgery



February 2012

Joint guidelines from the Royal College of Anaesthetists and the Royal College of Ophthalmologists

A For the patient with no history of significant systemic disease and no abnormal findings on examination at the nurse-led assessment, no special investigations are indicated.

✓ Any patient requiring special tests may need a medical opinion.

C It is unnecessary for patients to be fasted prior to local anaesthesia for eye surgery without sedation.

C The minimum monitoring (e.g. for a fit person having routine surgery under topical anaesthesia) is clinical observation, communication and pulse oximetry.

C The ECG and blood pressure should be monitored in sedated patients and those who are at risk of cardiovascular complications (e.g. hypertensives, patients with pacemaker, diabetics). In stable patients the NIBP measurements should be kept to a minimum to avoid discomfort and undue disturbance during surgery.

Local anaesthesia for ophthalmic surgery

Joint guidelines from the Royal College of Anaesthetists and the Royal College of Ophthalmologists



February 2012

- C All theatre personnel should have regular training in Basic Life Support (BLS).
- C There should be at least one person available in the operating theatre suite with an Immediate Life Support (ILS) or equivalent qualification, who should be supported by staff with the knowledge and skills to assist in resuscitation. Where the unit is free-standing and there is no immediate access to a formal cardiac arrest team there should be at least one person with Advanced Life Support (ALS) or equivalent. This is especially important where transfer of the patient may be necessary.
- C Ideally, an anaesthetist should be available in the theatre complex, particularly when needle blocks such as peribulbar, retrobulbar, and sub-Tenon's blocks for difficult cataracts, or when complex or long cases are being performed.
- C If an anaesthetist is not available in the hospital or ophthalmic unit, peribulbar or retrobulbar techniques should only be used if appropriately skilled staff are immediately available in the operating theatre.
- C A clear, agreed and regularly tested pathway to enable the patient to receive appropriate advanced medical care, including intensive care, should be in place for isolated units.

Conclusiones

- La cirugía de catarata baja morbilidad
- Eventos intraoperatorios mínimos
- Anestesiólogo: Hospitales, organización del S. Anestesia, demanda de confort por oftalmólogo y paciente, presupuestos....
- Guías de consenso (ambas especialidades)

Paciente en tratamiento antitrombótico

...

Management of antithrombotic therapies in patients scheduled for eye surgery

Fanny Bonhomme, Farhad Hafezi, Françoise Boehlen and Walid Habre

The large majority of patients undergoing ophthalmic surgery are elderly and take systemic medications on a regular basis, including antiplatelet and anticoagulant treatments. It is current practice for many physicians to discontinue antithrombotic treatment prior to surgery to avoid bleeding complications that may lead to, and, ultimately, to loss of vision. However, discontinuation of antithrombotic treatment is associated with an increased risk of thromboembolic events. The present narrative review compares the risks of bleeding when discontinuing antithrombotic drugs and the risk of thromboembolic events when continuing them. The published literature on this topic shows that discontinuation of antiplatelet or anticoagulant treatment leads to a substantially increased

risk of arterial or venous thromboembolic events and related complications, especially in patients with atrial fibrillation, prosthetic heart valves or recent coronary stenting. This risk is distinctly higher than the risk of significant

Thus, the current data are in favour of maintaining antiplatelet and anticoagulant drugs for most ophthalmic procedures, regardless of the anaesthetic techniques.

bleeding events reported without serious complications. Thus, the current data are in favour of maintaining antiplatelet and anticoagulant drugs for most ophthalmic procedures, regardless of the anaesthetic techniques.

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1. Procedimientos invasivos con **mínimo riesgo hemorrágico**. No está recomendado suspender el tratamiento anticoagulante / antitrombótico. Los que pertenecen a esta categoría están representados en la tabla 11.

Tabla 11. Procedimientos de mínimo riesgo hemorrágico

Estomatología	Extracción dental no complicada (1 molar o 1-2 dientes), endodoncias, limpieza bucal, frenulectomía, obturaciones (empastes)
Oftalmología	Cataratas
Dermatología	Drenaje de abscesos en zonas poco vascularizadas, ...
Digestivo	Endoscopias diagnósticas (gastroscopia y colonoscopia con biopsias). <i>Ver apartado 5.2.3</i>

Actualmente se estima que se realizan 450.000 cirugías de catarata/ año en España (SNS público/privado)

Estrategias de futuro

- Definir, consensuar, homogeneizar protocolos o guías de práctica clínica
- Liderado por las sociedades científicas implicadas
- Disponer de datos actuales para evaluar la evolución e implementación guías
- Revisar historias y verificar el ajuste o no al protocolo
- Realizar auditorias del proceso asistencial e instaurar acciones de mejora
- Investigación en resultados y complicaciones (oportunidad de mejora)
- Informar para sensibilizar a todos los implicados