



Guía de Manejo del dolor en Toracotomía

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Introducción.

El manejo efectivo del dolor esta asociado a un aumento en la satisfacción del paciente, a una movilización temprana, a una estancia hospitalaria mas corta y a una disminución en los costos. Independientemente de estos beneficios un porcentaje importante de los pacientes continúan sufriendo de dolor en el postoperatorio.

El alivio del dolor y del sufrimiento en los pacientes sometidos a un procedimiento debe ser una prioridad para los trabajadores de la salud envueltos en el cuidado del paciente.

La naturaleza subjetiva de la experiencia del dolor requiere flexibilidad, compasión y entendimiento por parte del medico tratante.

Los procedimientos quirúrgicos inevitablemente producen trauma de los tejidos y liberación de mediadores inflamatorios y dolor. Las nuevas técnicas y medicamentos aunados a un aumento en en nivel de atención del manejo del dolor en general han mejorado el cuidado de los pacientes con dolor.

Usando el protocolo de Cochrane un grupo de anestesiólogos y cirujanos con el soporte de la Sociedad Europea de Anestesia Regional y Terapia del Dolor, realizaron una revisión sistemática de las intervenciones analgésicas dirigidas a un procedimiento quirúrgico específico y lo presentaron bajo el nombre de Prospect (Procedure Specific Postoperative Pain management). Hay evidencia creciente de que la eficacia de los agentes analgésicos varía entre los diferentes procedimientos quirúrgicos.

Para la toracotomía el grupo Prospect realizó una revisión sistemática de la literatura desde 1966 a mayo del 2004 usando MEDLINE y EmBASE siguiendo el protocolo de la colaboración Cochrane. Se incluyeron estudios aleatorizados que evalúan intervenciones analgésicas en toracotomía y que reportaron el dolor en una escala análoga lineal. Se identificaron 332 estudios de intervenciones perioperatorias. 169 estudios fueron incluidos. 163 estudios fueron excluidos y la razón mas común por la que se excluyeron fue la ausencia de aleatorización (60 estudios).





Recomendaciones.

Las recomendaciones del grupo de trabajo de PROSPECT están graduadas de A a D basados en el nivel de evidencia de los estudios, los cuales están de acuerdo con el Centro de Medicina Basada en la Evidencia de Oxford. En el contexto de Prospect las recomendaciones basadas en evidencia específica por procedimiento son grado A (estudios clínicos aleatorizados), aquellos basados en evidencia transferible son grado B (estudios clínicos aleatorizados) o grado C (estudios retrospectivos o series de casos) y aquellos basados en la práctica clínica son grado D.

Información al paciente

Es esencial que los pacientes sometidos a toracotomía sean informados acerca de la naturaleza del procedimiento al cual van a ser sometidos, y que tengan unas expectativas reales de la intensidad del dolor que, pese al manejo, pueden presentar. Estos pacientes pueden sufrir de dolor muy severo en el postoperatorio si la analgesia no es manejada apropiadamente. La función pulmonar está alterada como resultado de la cirugía torácica y puede empeorarse aún más como efecto de la presencia de dolor. Por este motivo las principales metas del postoperatorio son un adecuado control del dolor y un mantenimiento de la función pulmonar.

Intervenciones Analgésicas Preoperatorias.

- No se recomienda el uso de clonidina sistémica debido a que hay una limitada evidencia del efecto analgésico en este tipo de cirugía (Grado A), la evidencia transferible de otros procedimientos similares muestra beneficio inconsistente (Grado B) y hay alto potencial de efectos adversos (Grado D)
- A pesar de la evidencia positiva transferible, el uso preoperatorio de dexmedetomidina no está recomendada debido a que falta evidencia específica en este tipo de cirugía y por los potenciales efectos secundarios (Grado D)
- A pesar de la evidencia positiva transferible de otro tipo de procedimientos sobre la reducción del dolor, el uso anticipado de corticosteroides no está recomendado debido a una limitada evidencia asociada a este tipo de procedimiento (Grado D)





- Los AINEs convencionales no están recomendados en el preoperatorio de toracotomía debido al riesgo de sangrado (Evidencia transferida grado B) y debido a que la administración preoperatoria no ofrece ninguna ventaja analgésica sobre la administración del mismo medicamento en el postoperatorio. (Grado A)
- Los inhibidores selectivos de la COX2 no están recomendados para el uso preoperatorio debido a que no hay evidencia de que su eficacia analgésica sea mayor que con la aplicación postoperatoria. (Grado D)
- Las dosis bajas de ketamina no se recomiendan debido a la falta de evidencia en este tipo de cirugía (Grado D), aunque los datos analgésicos en otro tipo de cirugía sean promisorios.
- El uso de gabapentina no está recomendado ya que no hay evidencia en este tipo de cirugía (Grado D) aunque los datos en otros tipos de procedimientos sean promisorios.
- Se recomienda el uso de anestésico local mas un opioide fuerte peridural torácico en el preoperatorio debido a la reducción del dolor en comparación con su administración postoperatoria sola. (Grado A). No hay suficiente información para recomendar un específico anestésico local o opioide sobre otro. Tampoco hay información suficiente como para recomendar una concentración o volumen específicos.
- La administración preoperatoria epidural lumbar de un opioide fuerte no está recomendada como primera elección. La ruta peridural torácica es más efectiva que la lumbar para aliviar el dolor post - toracotomía (Grado A). Los esteroides epidurales torácicos no se recomiendan debido a que no hay suficiente evidencia que soporten su uso (Grado D). Se recomienda el uso de epinefrina peridural si una dosis baja de anestésico local y-o opioide es usado (Grado D)
- Se recomienda aplicar un bolo único espinal preoperatorio de un opioide fuerte como parte de un régimen multianalgésico (Grado A), cuando la analgesia peridural o el bloqueo paravertebral no hayan sido posible administrarlos. (Grado D). Los opioides espinales están recomendados sobre los opioides administrados por PCA endovenosa, basados en una mayor reducción del dolor por hasta 24 horas sin interferencia sobre la función respiratoria. (Grado A)
- Se prefiere la aplicación de anestésico local mas opioide epidural torácico sobre un opioide espinal basados en la evidencia de que el efecto analgésico de la vía epidural tiene una mayor duración (mayor a 24 horas) (Grado A)
- Los bloqueos paravertebrales preoperatorios con anestésico local están recomendados como una alternativa a la vía peridural, basados en la evidencia de que esta técnica proporciona analgesia postoperatoria comparable y a que puede estar asociada a menos efectos adversos (Grado A)





- No se recomienda los bloqueos intercostales preoperatorios con anestésico local debido a que la evidencia es muy limitada. (Grado D)

Intervenciones Analgésicas Intraoperatorias:

- No se recomienda el empleo de AINEs convencionales durante la toracotomía debido a que se incrementa el riesgo de sangrado (Evidencia transferida Grado B).

- No se recomienda el uso de inhibidores selectivos de la COX2 en el intraoperatorio debido a que no hay evidencia en este tipo de cirugía de que la administración intraoperatoria sea mejor que su administración postoperatoria.

- No se recomienda el uso de ketamina en el intraoperatorio debido a la falta de evidencia en este tipo de cirugía (Grado D), aunque los datos analgésicos en otro tipo de cirugía sean promisorios.

- El uso de gabapentina no está recomendado ya que no hay evidencia en este tipo de cirugía (Grado D) aunque los datos en otros tipos de procedimientos sean promisorios.

- Se recomienda el uso de un anestésico local mas un opioide fuerte por vía peridural torácico basados en la mayor reducción del dolor en comparación con la administración postoperatoria sola (Grado A). No hay suficiente información para recomendar un específico anestésico local o opioide sobre otro. Tampoco hay información suficiente como para recomendar una concentración o volumen específicos

- No se recomienda la aplicación de opiodes fuertes epidurales lumbares como primera alternativa analgésica basados en que la ruta torácica es mas eficaz (Grado A)

- Los esteroides epidurales torácicos no se recomiendan debido a que no hay suficiente evidencia que soporten su uso (Grado D). Se recomienda el uso de epinefrina peridural si una dosis baja de anestésico local y-o opioide es usado (Grado D)

- Los bloqueos paravertebrales preoperatorios con anestésico local están recomendados como una alternativa a la vía peridural, basados en la evidencia de que esta técnica proporciona analgesia postoperatoria comparable y a que puede estar asociada a menos efectos adversos (Grado A)

- Se recomienda los bloqueos intercostales con anestésico local y preferiblemente administrados con un catéter si la analgesia epidural y paravertebral no fue posible (Grado D).





Esto está basado en la evidencia de que proporciona mayor analgesia que los analgésicos sistémicos (Grado A)

- La técnica operatoria está basada en factores diferentes al dolor postoperatorio (Grado D). Sin embargo, la toracotomía anterior puede reducir el dolor postoperatorio comparado con la técnica convencional. El uso de suturas intercostales pueden reducir el dolor postoperatorio comparado con el uso de suturas pericostales. Los flaps de músculo intercostal también se asocian a menos dolor.

Intervenciones Analgésicas postoperatorias:

- Se recomienda el uso de AINES convencionales si las técnicas regionales fueron inadecuadas (Grado A). La decisión de usarlos debe estar basada en los factores de riesgo que tenga el individuo.

- Se recomienda el uso de inhibidores selectivos de la COX2 si las técnicas regionales fueron inadecuadas. (Grado B) Su uso debe estar basado en el análisis cuidadoso de los factores de riesgo.

- Se recomienda el uso de opioides fuertes endovenosos por PCA si las técnicas regionales fallaron o no se pudieron realizar. (Grado D) El uso de opioides fuertes por vía endovenosa a intervalos de tiempo fijos con dosis de rescate es una alternativa efectiva (Grado D)

- No se recomienda el uso de dexmedetomidina ni clonidina debido a la falta de evidencia que soporte su uso en este tipo de cirugía (Grado D)

- No se recomienda el uso de ketamina en el postoperatorio debido a la falta de evidencia en este tipo de cirugía (Grado D), aunque los datos analgésicos en otro tipo de cirugía sean promisorios.

- El uso de gabapentina no está recomendado ya que no hay evidencia en este tipo de cirugía (Grado D) aunque los datos en otros tipos de procedimientos sean promisorios.

- Se recomienda el uso de opioides débiles para dolor leve a moderado moderado (VAS >30 <50 mm) en el postoperatorio tardío, solamente si los AINEs convencionales o los inhibidores selectivos de la COX2 fueron insuficientes. (Grado D)

- Se recomienda el uso de acetaminofén como parte de un régimen multianalgésico. (Grado D). No se recomienda su uso en dolor de alta intensidad (VAS mayor a 5)

- Se recomienda el uso de un anestésico local mas un opioide fuerte epidural torácico en infusión continua por 2 a 3 días (Grado A)





- Se recomienda el uso de epinefrina en la infusión peridural si se usa una dosis baja de anestésico local y/o opiode (Grado B)
- Se recomienda el uso de bloqueos paravertebrales con anestésico local en infusión continua por 2 a 3 días como una alternativa de la analgesia peridural torácica. (Grado A)
- Se recomienda realizar bloqueos intercostales e infusiones por catéteres por 2 a 3 días si la analgesia peridural torácica y el bloqueo paravertebral no pudieron realizarse. (Grado D)
- No se recomienda la aplicación de opiodes fuertes epidurales lumbares como primera alternativa analgésica basados en que la ruta torácica es mas eficaz (Grado A)



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