OP90 Do Patients With Open Fractures Need Urgent Surgery?

AUTHORS:

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INTRODUCTION:

Calling in staff and preparing the operating room for an urgent surgical procedure is a significant draw on hospital resources and disrupts care of other patients. It has been common practice to treat open fractures on an urgent basis. HTA methods can be applied to examine this prioritization of care, just like they can be applied to the acquisition of drugs and devices.

METHODS:

Our center completed a rapid systematic review of guidelines, systematic reviews, and primary clinical evidence, on urgent surgical debridement and stabilization of open fractures of long bones ("urgent" being defined as within six hours of the injury) compared to surgical debridement and reduction performed at a later time point. Meta-analyses were performed for infection and non-union outcomes and the GRADE system was used to assess the strength of evidence for each conclusion.

RESULTS:

We found no published clinical guidelines for the urgency of treating open fractures. A good systematic review on the topic was published in 2012. We found six cohort studies published since completion of the earlier review. The summary odds ratio for any infection in patients with later treatment was 0.97 (95% confidence interval (CI) 0.78–1.22, sixteen studies, 3,615 patients) and for deep or "major" infections was 1.00 (95% CI 0.74–1.34, nine studies, 2,013 patients). The summary odds ratio of non-union with later treatment was 0.95 (95% CI 0.65–1.41, six studies, 1,308 patients). There was no significant heterogeneity in any of the results (I-squared = 0 percent) and no apparent trends in the results as a function of study size or publication date. We graded the strength of each of the conclusions as very low because they were based on cohort studies where the treating physician could elect immediate treatment for patients with severe soft-tissue injuries or patients at risk of complications. This raises the risk of spectrum bias.

CONCLUSIONS:

Default urgent scheduling of patients with open fractures for surgical debridement and stabilization does not appear to reduce the risk of infection or fracture non-union. Based on this information, our surgery department managers no longer schedule patients with open fractures for immediate surgery unless there are specific circumstances necessitating it.

OP91 Individual Participant Data Meta-Analysis Of Exercise Rehabilitation In Heart Failure

AUTHORS:

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INTRODUCTION:

Traditional meta-analyses synthesize aggregate data obtained from study publications or study authors, such as a treatment effect estimate and its associated uncertainty. An increasingly important approach is the meta-analysis of individual participant data (IPD) where the raw individual-level data are obtained for each study and used for synthesis. This study compares and discusses results from an IPD meta-analysis vs standard meta-analysis of randomized controlled trials of exercise cardiac rehabilitation in chronic heart failure (CHF).

METHODS:

Based on a previous systematic review, the Exercise Training Meta-Analysis of Trials for Chronic Heart Failure (ExTraMATCH II) identified and collected IPD from randomized controlled trials (RCTs) that compared exercise rehabilitation with a non-exercise control with a minimum follow-up of six months. For this abstract, the outcome of interest was all-cause mortality. Original IPD were checked for consistency and compiled in a master dataset. Standard meta-analytic models were used for aggregate data whilst two-stage and one-stage approaches, accounting for the clustering of participants within studies, were planned for statistical analyses of IPD.

RESULTS:

Overall thirty-three RCTs were included in the original systematic review, whereas within the ExTraMatch II

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project, IPD on all-cause mortality were obtained from seventeen RCTs of approximately 3,700 patients. From aggregate data there was no significant difference in pooled mortality (relative risk 0.92, 95% confidence interval 0.67 to 1.26). IPD analysis revealed 701 events across exercise and control groups. Our ongoing IPD analyses will allow us to examine how patients' characteristics (e.g. age, New York Heart Association functional class, ejection fraction) modify treatment benefit.

CONCLUSIONS:

Given the limitations of current trial level meta-analysis evidence in CHF, access to individual data from several RCTs offers a timely and important opportunity to revisit the question of which CHF patient subgroups benefit most from exercise-based rehabilitation.

OP92 Non-Opioid Therapy For Pain Management – Health Technology Assessment In A Time Of Crisis

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INTRODUCTION:

North America is facing a public health epidemic – the opioid crisis – part of which is attributed to the inappropriate use of opioids in pain management. As such, the 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain recommends optimizing non-opioid pharmacotherapy or non-pharmacological therapy to treat chronic pain, before a trial of opioids. However, the Guideline itself is not designed to provide evidence on the effectiveness of these non-opioid alternatives, leaving a gap for those attempting to put the recommendation into practice.

METHODS:

In collaboration with its partners, including clinicians and policymakers, the Canadian Agency for Drugs and Technologies (CADTH) identified the gaps in evidence, and developed an action plan to bridge the evidence gaps to support the optimization of non-opioid alternatives in pain management.

RESULTS:

Since the release of the Guideline, CADTH produced over 20 Rapid Response reports that synthesize and appraise evidence on non-opioid alternatives in the management of a wide range of pain, both acute and chronic. Additionally, CADTH has also reviewed evidence on multidisciplinary pain treatment programs, and is developing environmental scan reports on the availability and access to non-pharmacological treatments for pain in Canada, and on drugs for emerging non-opioid pain. Further, CADTH developed knowledge mobilization tools based on the evidence reviews. The evidence reviews and tools are used as a resource by CADTH partners, including the Coalition of Safe and Effective Pain Management and McMaster University National Pain Center.

CONCLUSIONS:

This presentation will discuss the role of HTA and CADTH to fill the gaps in evidence for a crucial clinical practice guideline recommendation in a time of public health crisis, and help put the evidence into action. It will present the evidence synthesized by CADTH on various non-opioid alternatives for pain management, while highlighting the remaining gaps in evidence. Understanding the evidence on non-opioid alternatives will inform clinical and policy decisions and potentially reduce inappropriate use of opioids in pain management.

OP95 Are Patient-Reported Outcome Measures Meeting Today's Standards?

AUTHORS:

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INTRODUCTION:

Over the past decade, health technology assessment (HTA) agencies have become interested in improving the patient-centeredness of their assessments. A common approach has been to prioritize patient-reported outcomes (PROs), often describing PROs as patient-relevant or patient-oriented. However, it is often unclear whether and to what degree PRO measures (PROMs) truly reflect what is important to patients. This review examined the pedigree of a sample of measures

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