



CIRUGÍA y CIRUJANOS

Órgano de difusión científica de la Academia Mexicana de Cirugía
Fundada en 1933

www.amc.org.mx www.elsevier.es/circir



GENERAL INFORMATION

Evidence based surgery: A necessary tool[☆]



Héctor César Duran-Vega*

Departamento de Cirugía Plástica y Ortopedia, Hospital General Regional T1, Instituto Mexicano del Seguro Social (IMSS), Mérida, Yucatán, México

Received 18 February 2014; accepted 19 May 2014

KEYWORDS

Evidence based medicine;
Reproducibility of results;
Methods;
Access to information;
Randomised controlled trial

Abstract

Background: Evidence-based surgery is a tool that has been adopted worldwide by surgeons. As all decisions must be current and have a scientific basis, the approach for performing it must be standardised.

Five important steps are required to perform surgery based on evidence. Convert the need for information into a question that can be answered, finding the best information to answer that question, critical evaluation of the evidence, and its validity, impact and applicability, integrating the evidence with your own experience, and with the evaluation of the patients. This should take into account their biology, values and specific circumstances, as well as to evaluate the effectiveness and efficiency of the execution of steps 1–4 and propose how to improve them.

Conclusion: This article presents the main tools to perform surgery properly based on evidence. © 2015 Academia Mexicana de Cirugía A.C. Published by Masson Doyma México S.A. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

PALABRAS CLAVE

Medicina basada en la evidencia;
Reproducibilidad de resultados;
Métodos;

Cirugía basada en la evidencia. Una herramienta necesaria

Resumen

Antecedentes: La cirugía basada en la evidencia es una herramienta que ha sido adoptada en todo el mundo por los cirujanos, ya que todas nuestras decisiones deben ser actualizadas, y tener un sustento científico; sin embargo, tenemos que aprender a sistematizar el abordaje para realizarla.

[☆] Please cite this article as: Duran-Vega HC. Cirugía basada en la evidencia. Una herramienta necesaria. Cir Cir. 2015;83:265–70.

* Correspondence to: Centro Médico de Las Américas CMA, Consultorio #317, Calle 54 #365 x 33-a y Av. Pérez Ponce, Col.: Centro, C.P. 97000, Mérida, Yucatán, México. Tel.: +52 9999 260037.

E-mail address: hcdv@hotmail.com

Acceso a la información;
Ensayo clínico controlado

Para llevar a cabo la cirugía basada en la evidencia, se requieren 5 pasos importantes que son: convertir la necesidad de información en una pregunta que pueda responderse; buscar la mejor información con la cual responder esa pregunta; evaluación crítica de esa evidencia y de su validez, impacto y aplicabilidad; integrar la evidencia con la propia experiencia y con la evaluación clínica de nuestros pacientes, en su biología, valores y circunstancias específicas, y evaluar la efectividad y eficiencia de la ejecución de los pasos 1 al 4 y proponer cómo mejorarlos. *Conclusión:* Este artículo comparte las herramientas principales para realizar de manera correcta una cirugía basada en la evidencia.

© 2015 Academia Mexicana de Cirugía A.C. Publicado por Masson Doyma México S.A. Este es un artículo Open Access bajo la licencia CC BY-NC-ND (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Background

Evidence-based medicine is a movement which, pursuant to Manterola¹ was begun by Sackett and Guyatt at McMaster University in 1990. They declared themselves the heirs of observational medicine, which was led by Pierre Louis in the nineteenth century, who was the first to apply a numerical method to compare the results of patients between 2 groups with no differences, which is currently considered the first trial.^{1,2} Sackett defined evidence-based medicine in 1996 as the “the conscientious, explicit and judicious use of current best evidence in making decisions about the care of the individual patient”.³ The definition has been modified since its adoption, and currently stands as “integrating the best available evidence of research with clinical experience and the patient’s values”.⁴ It has been adopted by multiple specialisms and medical groups, and we are witnessing a transition to where it is now an important element in the decision-making process, not only in clinical practices but also in other related areas such as legal, administrative, research and editorial. Also, it helps to integrate in a simple way a series of convergent disciplines such as epidemiology, biostatistics, critical analysis of biomedical literature, the study of clinical research designs, social sciences applied to health, administration and health management.¹

Although this tool is very useful and generates a clinical practice with good reason, it has not been as widely accepted in surgery as in general medicine, internal medicine and its subspecialisms. Surgeons usually oppose evidence-based medicine in surgical practice, and for many reasons.⁵ There is a general belief that surgeons prefer simple and quick responses to problems, and evidence-based medicine may be considered exactly the opposite. According to Sevdalis and McCulloch, it was McGreevy and Wiebe in an article entitled “A preliminary study of surgical personality”⁶ who explained that surgeons have personality features with a tendency to action instead of contemplation, intuition instead of calculation and, without a doubt, evidence-based medicine requires taking time, analysing and being critical. The use of evidence-based medicine in surgery or evidence-based surgery is a term that has already been coined, integrated to general surgery and surgical specialisms, and must be part of our daily work, since it helps us make decisions integrated with evidenced

scientific grounds, which is highly valuable, especially as our performance is always more exposed, not only to the communication media and social networks, but also legal medicine.⁷

The *goal* of this work is to share the knowledge and basic steps to develop it.

The 5 basic components of evidence-based surgery

To carry out evidence-based surgery, there are 5 important steps: (1) Converting the need for information into a question that can be answered. (2) Searching for the best information to answer that question. (3) Making a critical assessment of that evidence and its validity, impact and applicability. (4) Integrating evidence with experience and the clinical assessment of our patients, their biology, values and specific circumstances. (5) Evaluating the effectiveness and efficiency of the execution of steps 1–4, and proposing how to improve them.

Converting the need for information into a question that can be answered

The first step is knowing exactly what we are looking for. If we cannot convert our doubt into a question that can be answered, we can hardly find the answer. The research question may be within one of these 4 main areas: diagnosis, risk, prognosis or treatment.⁸ We must generate keywords for this question to make the search for internet databases easier.⁹ There is a strategy to define the problem and turn it into an initial question. It is called PICO strategy; the initials of the word make reference to: problem of the patient (defines the population of interest), intervention considered (what are the interventions to be considered as alternatives?), comparison with the standard intervention (which is the treatment we are considering, as usual or standard?) and *outcome* in English, or results (what are the results we are interested in?).¹⁰ For instance, if we were ready to treat a patient with sacral decubitus ulcer with hydrocolloid, but we would like to consider solving it faster with negative suction therapy, we could ask the question in [Table 1](#).

Download English Version:

<https://daneshyari.com/en/article/4283492>

Download Persian Version:

<https://daneshyari.com/article/4283492>

[Daneshyari.com](https://daneshyari.com)