

Revision of arthroplasty registers: international experiences

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Introduction

- Existing registers have been collecting data systematically
- A revision of these experiences could help in the development of a Spanish register of arthroplasties

Aim

- Describe the structure, functioning and content of international arthroplasty registers

Method

- Search on Internet of registers, technical reports and doctoral thesis
- Search on *Pubmed* of references to the development or validation of registers

Key words: arthroplasty, endoprosthesis, prosthesis, hip, knee, register, country (ex. Norway)

- Exhaustiveness
 - contact with key persons
 - register links in web pages

Method (II)

- Information on each register was described
 - ✓ Name, contact details
 - ✓ Structure, participants, financial sources
 - ✓ Information sources
 - ✓ Method to collect information
 - ✓ Event determining effectiveness
 - ✓ Variables collected
 - ✓ Strategy of analysis and results
 - ✓ Dissemination of results
 - ✓ Quality of data
 - ✓ Limitations of the register
 - ✓ Other results from the register
- Content analysis was carried out

Results

Registers identified through the Internet and PubMed (n=15)

Registers identified through contact with key person (n=7)

European registers

- Scotland(1999)
- England and Wales (2003)
- Denmark (hip^B, 1995)
- Finland (1980)
- Italy (Emilia-Romana, 1990)
- Norway (1987)
- Rumania (2001)
- Sweden (hip, 1979)
- Sweden (knee, 1975)
- European Register (2002)

Other registers

- Australia (1999)
- Canada (2000)
- Ontario (2000)
- New Zeland (1998)

- Germany
- Slovakia
- France
- Hungary
- Moldavia Republic
- Check Republic
- Turkey

* Dr. Gerold Labek, vice president of EAR register

Structure and functioning

Register	Finance source	Committees
England & Wales	<ul style="list-style-type: none">- Government	<ul style="list-style-type: none">- Clinical committee- Regional advisory committee- Quality review committee- Investigation committee- Patient measures committee
Norway	<ul style="list-style-type: none">- Government	<ul style="list-style-type: none">- Scientific society committee- Advisory Committee- Executive committee
Sweden (knee)	<ul style="list-style-type: none">- Government- Specific grants- Lund hospital	<ul style="list-style-type: none">- Scientific society committee- Advisory Committee
Australia	<ul style="list-style-type: none">- Government- Scientific society- Private companies	<ul style="list-style-type: none">- Scientific society committee- Advisory Committee

Structure and functioning (II)

Register	Information sources	Dissemination
England and Wales	<ul style="list-style-type: none">- Clinical forms- MBDS	<ul style="list-style-type: none">- Annual report- Internet site- Conferences
Norway	<ul style="list-style-type: none">- Clinical forms- MBDS- Vital statistics- Register for TB and CC- Norwegian register fractures	<ul style="list-style-type: none">- Annual report- Internet site- Conferences- Publications
Sweden (knee)	<ul style="list-style-type: none">- Clinical forms- MBDS- Population census and vital statistics	<ul style="list-style-type: none">- Annual report- Internet site- Conferences- Publications
Australia	<ul style="list-style-type: none">- Clinical forms- MBDS- Mortality register- Register of health costs	<ul style="list-style-type: none">- Annual report- Internet site- Conferences

Outcome measures of registers

- Survival of the prosthesis is the main outcome of effectiveness
- In some registers additional follow-up studies are carried out
 - Satisfaction
 - Functional status
 - HRQL
 - Pain
 - Complications
 - Mortality
 - Costs

Collected variables

Structure

Hospital characteristics

Type of hospital
Number of procedures
Type of operating theatre
Surgeon and assistant profile

Process

Surgical technique and procedure characteristics

Type of prophylaxis and anaesthesia
Use of minimally invasive surgery
Bone grafts
Computer-assisted surgery
Trochanteric osteotomy

Prosthesis characteristics

Type of arthroplasty (primary, revision, hip, knee)
Side (left, right)
Components: make, model, reference and batch number, use of cement, polyethylene insert

Outcome

Prosthesis survival
Complications
Mortality
Health related quality of life, pain, functional status or satisfaction with the procedure

Health system

Health system characteristics

Accessibility or geographic variation

Pacients

Patient characteristics

Sex, age, personal identification code, place of residence
Primary diagnosis and reason for revision, comorbidities, previous interventions, height and weight, pre-surgical risk (ASA), bone defects

Limitations

- Missing information on registers in development, without Internet site
- Aspects not included in annual reports in some registers
- Need of external revision of this report

Registres internacionals d'artroplàsties

Vicky Serra-Sutton, Alejandro Allepuz

Resum de la versió preliminar de l'informe: Serra-Sutton V, Allepuz A, Espallargues M, Pons JMV. Revisió de registres d'artroplàsties: experiències internacionals. Barcelona: Agència d'Avaluació de Tecnologia i Recerca Mèdiques; 2006.

Els registres d'artroplàsties constitueixen una eina per a la vigilància epidemiològica i l'anàlisi de l'efectivitat de les intervencions segons els diferents models de pròtesi i els factors associats. L'objectiu d'aquesta revisió ha estat descriure la seva estructura, funcionament i variables recollides per ajudar en el disseny d'un registre d'artroplàsties a Catalunya.

Mètodes

Es va realitzar una cerca d'informes tècnics a Internet així com una revisió de la lite-

Els registres d'artroplàsties van ser desenvolupats per a l'avaluació de la qualitat dels diferents models de pròtesis i de l'atenció sanitària

www.aatrm.net

Preliminary conclusions

- 1 Newly created registers should have support of scientific societies and healthcare administration
- 2 It is recommended to create committees related to the register
- 3 A part from clinical forms, it is important to use other sources of information

Preliminary conclusions (II)

- 4 The most effective strategy to collect data is an *on -line automated data retrieval system*
- 5 It is important that each register defines the event that determines effectiveness
- 6 Prosthesis survival, even if limited is a robust outcome measure

Preliminary conclusions (III)

7 It is necessary to report on other outcomes of effectiveness (pain, functional status)

8 It is recommended to develop an annual report and Internet site for the dissemination of results

9 Information on the prosthesis, surgical technique, patients and centres should be collected