

ESEMPI DI APPLICAZIONI DELLE VALUTAZIONI HTA

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**9-10-11
16-17 marzo 2010**

**Corso itinerante di formazione Regionale in tema di HTA
1[^] giornata – sessione II**

I modelli di HTA disponibili

Evaluating HTA reports by a checklist based on 14 items

16 June 2008

Andrea Messori,
Coordinator
Laboratory of Pharmacoeconomics, c/o Azienda Sanitaria Pistoia, Italy

**CHECKLIST OF ITEMS TO BE INCLUDED IN A “GOOD” HTA REPORT EVALUATING
AN INNOVATIVE TECHNOLOGY**

HTA CORE MODEL - INAHTA

1. Current use of the technology (implementation level)
2. Description and technical characteristics of technology
3. Safety
4. Effectiveness
5. Costs, economic evaluation
6. Ethical aspects
7. Organisational aspects
8. Social aspects
9. Legal aspects

fonte: <http://www.eunetha.eu/upload/WP4/EUnetHTAFirstPublicDraftRevised-2007-07-11.pdf>

INAHTA

A checklist for health technology
assessment reports

The checklist

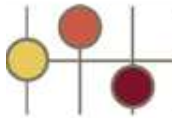


ESEMPI

Analisi di alcune valutazioni di HTA pubblicate (GIUGNO 2009)

- ✓ HTA database INAHTA: archivio implementato in collaborazione con l'Università di York e contenente più di 7000 riferimenti di articoli relativi all'Health Technology Assessment prodotti a partire dal 1988
- ✓ parola chiave: "drug eluting stent"
- ✓ 17 citazioni estratte
- ✓ 6 reports selezionati. Sono stati selezionati in specifico i report prodotti da organizzazioni istituite in Paesi particolarmente attivi dal punto di vista delle valutazioni di nuove tecnologie e nei quali la disciplina dell'HTA è una realtà consolidata e utilizzata sia a livello nazionale sia a livello locale: **Francia, Canada, Regno Unito, Spagna, Svezia**

http://www.crd.york.ac.uk/crdweb/



Centre for Reviews and Dissemination



National Institute for Health Research

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DRUG ELUTING STENT

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HTA (17)

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Select Database

Title

Year published

Author

Source

Record type

Select Database	Title	Year published	Author	Source	Record type
<input type="checkbox"/> HTA	Effectiveness of invasive treatment for coronary artery disease: overview of systematic reviews	2005	Finnish Office for Health Care Technology Assessment	Helsinki: Finnish Office for Health Care Technology Assessment (FinOHTA)	Brief publication record
<input type="checkbox"/> HTA	Drug-eluting stents for the treatment of in-stent restenosis	2007		Ciudad de Buenos Aires: Institute for Clinical Effectiveness and Health Policy (IECS)	Full publication record
<input type="checkbox"/> HTA	Drug eluting stents in comparison to uncoated stents in the treatment of cardiopathy	2006	Kvas E	Vienna: Ludwig Boltzmann Institut fuer Health Technology Assessment (LBIHTA)	Full publication record
<input type="checkbox"/> HTA	Drug-eluting stents	2005	Medical Services Advisory Committee	Canberra: Medical Services Advisory Committee (MSAC)	Full publication record
<input type="checkbox"/> HTA	Economic evaluation of drug eluting stents	2005	Mittmann N, Brown A, Seung S J, Coyle D, Cohen E, Brophy J, Title L, Oh P	Ottawa: Canadian Coordinating Office for Health Technology Assessment (CCOHTA)	Full publication record
<input type="checkbox"/> HTA	An economic analysis of drug eluting coronary stents: a Quebec	2004	Brophy J, Erickson L	Montreal: Agence	Full

Analisi di 6 valutazioni di HTA relative ai “drug eluting stent”

- 1. FRANCIA** - Haute Autorité de Santé (HAS) - ***CYPHER®,
endoprothèse coronaire (stent) à libération de sirolimus***
- 2. SPAGNA** - Agencia de Evaluación de Tecnologías Sanitarias (AETS) - ***Endoprótesis coronarias liberadoras de Fármacos***
- 3. United Kingdom** - National Coordinating Centre for HTA (NCCHTA) - ***Drug-eluting stents: a systematic review and economic evaluation***
- 4. SVEZIA** - Swedish Council on Technology Assessment in Health Care (SBU) - ***Drug eluting stents in coronary arteries***
- 5. CANADA** - Canadian Coordinating Office for Health Technology Assessment (CCOHTA) - ***Economic Evaluation of Drug Eluting Stents***
- 6. CANADA** - Agence d'évaluation des Technologies et des modes d'intervention en Santé (AETMIS) - ***An Economic Analysis of Drug Eluting Coronary Stents. A Québec Perspective***

Avis de la Commission

25 septembre 2002

Dispositif: CYPHER®, endoprothèse coronaire (stent) à libération de sirolimus

Modèles : le stent CYPHER® existe en plusieurs tailles avec autant de références CRSXXXXY, où XX est la longueur nominale de l'endoprothèse et YYY son diamètre nominal.

	Diamètre nominal	Longueur nominale					
		8 mm	13 mm	18 mm	23 mm	28 mm	33 mm
	2,25 mm	CRS08225	CRS13225	CRS18225	CRS23225	CRS28225	CRS33225
	2,5 mm	CRS08250	CRS13250	CRS18250	CRS23250	CRS28250	CRS33250
	2,75 mm	CRS08275	CRS13275	CRS18275	CRS23275	CRS28275	CRS33275
	3,0 mm	CRS08300	CRS13300	CRS18300	CRS23300	CRS28300	CRS33300
	3,5 mm	CRS08350	CRS13350	CRS18350	CRS23350	CRS28350	CRS33350
	4,0 mm	CRS08400	CRS13400	CRS18400	CRS23400	CRS28400	CRS33400
	4,5 mm	CRS08450	CRS13450	CRS18450	CRS23450	CRS28450	CRS33450
	5,0 mm			CRS18500	CRS23500	CRS28500	CRS33500

Conditionnement : unitaire stérile.

Le stent est fixé sur le ballonnet d'un cathéter d'insertion qui sert à sa mise en place. Le système est emballé dans un étui stérile, lui-même emballé dans un étui en aluminium non stérile.

Fabricant et demandeur : CORDIS Europa N.V

Nature de la demande

Demande d'inscription sur la liste des produits et prestations mentionnés à l'article L. 165-1 du code

- **Full text:** 17 pagine
- **Lingua:** francese
- elaborato per conto dell'Haute Autorité de Santé (HAS) française, da parte della CEPP, Commission d'Évaluation des Produits et Prestations
- **Obiettivo:** valutare la richiesta di inserimento nelle liste di rimborsabilità nazionali di uno specifico stent coronarico medicato in commercio, CYPHER, da parte del fabbricante Cordis

En conclusion, la Commission d'Evaluation des Produits et Prestations estime que le service rendu de CYPHER® est suffisant pour l'inscription sur la liste des Produits et Prestations prévue à l'article L. 165-1 du code de la sécurité sociale.

FICHA TÉCNICA

Endoprótesis coronarias liberadoras de fármacos.

Datos generales

Fecha de creación / modificación

23/06/2004

Descripción de la Tecnología

Tratamiento endoluminal de las estenosis coronarias con prótesis coronaria (stent) liberadoras de un fármaco o combinaciones de ellos (rapamicina, taxol, inhibidores glicoproteínas IIb/IIIa) con el fin de minimizar o prevenir la reestenosis arterial.

Pacientes y condición clínica a la que se aplica la Tecnología

Pacientes con isquemia coronaria que puedan tratarse por angioplastia (ACTP).

Indicación o condición clínica según CIE-9-MC

1. ENFERMEDAD CARDIACA ISQUÉMICA.
2. INFARTO AGUDO MIOCARDIO.

Clasificación de la Tecnología

Terapéutica

Importancia sanitaria de la condición clínica a la que se aplica la Tecnología

Prevalencia

La prevalencia de angina en población española de 45-74 años es de 7,5%.

Incidencia

125.000 personas al año con enfermedad coronaria.

Carga de Enfermedad

Enfermedad cardiovascular es la primera causa de mortalidad en España: 38% de las defunciones. Enfermedad isquémica ocasiona el 29% de las muertes cardiovasculares. Pérdida de calidad de vida y discapacidad laboral.

SPAGNA

(2004)

- **Full text:** 5 pagine
- **Lingua:** spagnola
- elaborato dall'organizzazione spagnola di HTA costituita a livello centrale, AETS, nell'ambito dell'attività di informazione precoce e aggiornata sulle tecnologie sanitarie di nuova introduzione denominata *Detección de Tecnologías Emergentes. SINTESIS - nuevas tecnologías*
- fornisce dei commenti relativi all'impatto per la salute, impatto economico, etico, sociale, legale e organizzativo spagnolo.

Läkemedelsavgivande stentar i hjärtats kransartärer

ALERT | TIDIGA BEDÖMNINGAR AV NTA-MEDICINSKA METODER | WWW.SBU.SE

Publicerad 04-03-17
Version 1

Alerts bedömning

Metod och målgrupp: Koronar perkutan intervention (PCI) är ett samlingsbegrepp för ingrepp via kateter i hjärtats kransartärer, t ex ballongvidgning, med syfte att vidga en förträngning (stenos). En förträngning som vidgats kan emellertid återkomma (restenos). Inläggande av tunna metalproteser, formade som nät (stent), har visats minska risken för restenos till närmare hälften jämfört med om man vidgat med enbart ballong. Man har inte funnit skillnader i risk för död eller hjärtinfarkt vid jämförelser mellan enbart ballongvidgning och ballongvidgning med tillägg av stent. Under år 2003 utfördes cirka 13 000 ingrepp med PCI i Sverige, varav de flesta med tillägg av stent. Ett kvarstående problem är att symptom kan återkomma pga inväxt av vävnad från kärnväggen in i stentet (in-stent restenos). Man provar nu att på stentytan fästa läkemedel som ska förhindra vävnadsinväxt (Drug Eluting Stent – DES).

Patientnytta och risker: I sju randomiserade studier, omfattande 3 659 patienter med förträngning i ett kärl, jämfördes behandling med läkemedelsavgivande stent (DES) med behandling med ett stent utan läkemedel (Bare Metal Stent – BMS). Uppföljning (upp till ett år) visade att i genomsnitt 4 procent av patienterna som behandlats med DES genomgick minst ett förnyat ingrepp i förträngningen. Motsvarande andel för gruppen som behandlats med BMS varierade mellan studierna från 11 till 21 procent. En del av de restenoserna som ledde till förnyade ingrepp uppläcktes i samband med angiografier som enligt protokollet skulle göras under uppföljningen. Det är därför oklart i vilken utsträckning de skulle ha föränt ett förnyat ingrepp om dessa grundats enbart på att patienterna återfått symptom. Från en analys av ett holländskt register, omfattande 958 konsekutiva patienter, jämfördes resultaten från rutinmässig behandling med DES respektive BMS. Resultaten, där patienternas symptom var indikation för reingrepp, visade att 3,7 procent av dem som fick DES jämfört med 10,9 procent av dem som fick BMS genomgick minst ett förnyat ingrepp i form av PCI eller CABG (bypassoperation) inom ett år.

Inga jämförelser mellan grupperna som fått DES respektive BMS avseende symptom, livskvalitet eller läkemedelsanvändning efter ingreppet har redovisats. Efter uppföljning t o m ett år visades inte någon skillnad i dödlighet eller förekomst av hjärtinfarkt mellan grupperna som behandlats med DES respektive BMS, vare sig i de randomiserade studierna eller i registret. Risken för subakut trombos var, vid såväl DES som BMS, mindre än 1 procent i de randomiserade prövningarna. Användning av DES tycks vara förenad med ökad frekvens av så kallad malapposition jämfört med BMS, dvs att stentarna vid uppföljande undersökning inte suttit fast i kärnväggen över hela sin yta. Med uppföljning upp till 18 månader har man inte funnit att detta medfört några komplikationer.

Ekonomiska aspekter: Ett läkemedelsavgivande stent kostar i genomsnitt cirka 11 000 kronor mer än ett stent utan läkemedel. Merkostnaden för svensk sjukvård om man genomgående skulle övergå till DES, vid nuvarande volym av PCI, uppskattas till cirka 220 miljoner kronor per år. En del av denna kostnad uppvägs av ett minskat behov av att göra förnyade ingrepp i förträngningen. En kalkyl har visat att denna kostnadsbesparing är i storleksordningen 8 miljoner kronor per år för varje procentenhet som behovet av förnyade ingrepp minskar. Någon studie av kostnadseffektivitet vid övergång till DES har inte identifierats.

Kunskapsläget: Det finns starkt vetenskapligt stöd för att behandling med DES, jämfört med BMS, minskar risken för restenos inne i stentet (Evidensstyrka 1¹). Uppföljning upp till ett år har visat att färre förnyade ingrepp har genomförts bland patienter som behandlats med DES jämfört med dem som behandlades med BMS (Evidensstyrka 1¹). I vilken mån detta varit av betydelse för patientens symptom, läkemedelsanvändning eller välbefinnande har inte redovisats. Det finns, vid uppföljning till ett år, inte stöd för skillnader i risk för hjärtinfarkt eller död mellan DES och BMS. Det finns inte stöd för skillnader i biverkningar och komplikationer mellan DES och BMS.

¹ Detta är en gradering av styrkan i det vetenskapliga underlaget som en slutsats grundas på. Graderingen görs i fyra nivåer; Evidensstyrka 1 = starkt vetenskapligt underlag, Evidensstyrka 2 = måttligt starkt vetenskapligt underlag, Evidensstyrka 3 = begränsat vetenskapligt underlag, Evidensstyrka 4 = otillräckligt vetenskapligt underlag.

SBU Alert beivras i samverkan med Läkemedelsverket, Socialstyrelsen och Landstingsförbundet

SVEZIA

(2004)

➤ **Full text: 10 pagine**

➤ **Lingua: svedese (summary disponibile in lingua inglese)**

➤ **prodotto dal Consiglio Svedese per l'HTA - Swedish Council on Technology Assessment in Health Care (SBU) - istituito dal Governo e successivamente divenuto agenzia pubblica indipendente**

➤ **la valutazione rientra nell'attività di identificazione e prima valutazione di tecnologie sanitarie innovative della SBU, denominata "Alert"**

Drug-eluting stents: a systematic review and economic evaluation

RA Hill, A Boland, R Dickson, Y Dündar, A Haycox, C McLeod, R Mujica Mota, T Walley and A Bagust



November 2007

Health Technology Assessment
NHS R&D HTA Programme
www.hta.ac.uk



REGNO UNITO

(2007)

- **Full text:** 260 pagine
- **Lingua:** inglese
- prodotto dal National Coordinating Centre for HTA (NCCHTA), centro che coordina il Programma di Ricerca e Sviluppo del NHS (National Health Service) inglese
- **Obiettivo:** valutare efficacia clinica (clinical effectiveness) e costo-efficacia (cost-effectiveness) dei DES rispetto ai BMS (stent metallici nudi)

CCOHTA

Technology

Report

Issue 53

February 2005

Economic
Evaluation of
Drug Eluting
Stents

Canada

(2004-2005)

AETMIS - 2004

**An Economic Analysis
of Drug Eluting Coronary
Stents**

A Québec Perspective

AGENCE D'ÉVALUATION DES TECHNOLOGIES
ET DES MODES D'INTERVENTION EN SANTÉ

Québec

- **Full text:** 1. CCOHTA 74 pagine
2. AETMIS 53 pagine
- **Lingua:** inglese/francese
- prodotti dal Canadian Coordinating Office for Health Technology Assessment - CCOHTA (ora CADTH) e dall'Agence d'évaluation des Technologies et des modes d'intervention en Santé - AETMIS
- analisi di costo-efficacia e di impatto sul budget (BIA) per gli stent medicati al sirolimus e paclitaxel secondo la prospettiva dell'ospedale e delle province dell'Ontario e del Quebec

Discussione

- ✓ forte disomogeneità, soprattutto in termini di forma
- ✓ In tutti i 6 i casi l'oggetto di indagine è stato individuato sulla base della rilevanza epidemiologica ed in considerazione dell'impatto sulla spesa sanitaria
- ✓ Tutti concordano sull'assenza di dati a lungo termine in grado di dimostrare efficacia e sicurezza dei DES
- ✓ HAS, CCOHTA, AETMIS suggeriscono istituzione di registri ad hoc. Il report inglese (NCCHTA) raccomanda la conduzione di ulteriori trials clinici a lungo termine
- ✓ 5 dei 6 report analizzati forniscono raccomandazioni generali (SBU, AETS, NCCHTA, CCOHTA, AETMIS); solo uno (HAS) ha come obiettivo quello di elaborare un giudizio per l'introduzione del device valutato tra i prodotti rimborsati dal SS francese
- risulta importante la condivisione e armonizzazione della metodologia e degli strumenti operativi per lo sviluppo di un modello di HTA efficace e sostenibile da applicare a tutti gli studi in materia di HTA, pur nel rispetto delle autonomie regionali e locali

PubMed:

"Drug-Eluting Stents"[Mesh] AND ("Health Technol Assess"[Journal] OR "Health Technol Assess (Rockv)"[Journal] OR ("health"[All Fields] AND "technology"[All Fields] AND "assessment"[All Fields]) OR "health technology assessment"[All Fields])

Results: 5

- 1. The feasibility of harmonizing health technology assessments across jurisdictions: a case study of drug eluting stents.**

Trueman P, Hurry M, Bending M, Hutton J.

Int J Technol Assess Health Care. 2009 Oct;25(4):455-62. PMID: 19845975 [PubMed - indexed for MEDLINE]

- 1. Cost-effectiveness analyses of drug eluting stents versus bare metal stents: a systematic review of the literature.**

Neyt M, Van Brabandt H, Devriese S, De Laet C.

Health Policy. 2009 Jul;91(2):107-20. Epub 2009 Jan 9. Review. PMID: 19135756 [PubMed - indexed for MEDLINE]

- 3. Drug-eluting stents: a systematic review and economic evaluation.**

Hill RA, Boland A, Dickson R, Dündar Y, Haycox A, McLeod C, Mujica Mota R, Walley T, Bagust A.

Health Technol Assess. 2007 Nov;11(46):iii, xi-221. Review. PMID: 17999841 [PubMed - indexed for MEDLINE]

- 4. Economic evaluation of drug-eluting stents: a systematic literature review and model-based cost-utility analysis.**


Kuukasjärvi P, Räsänen P, Malmivaara A, Aronen P, Sintonen H.

Int J Technol Assess Health Care. 2007 Fall;23(4):473-9. Review. PMID: 17937836 [PubMed - indexed for MEDLINE]

- 5. Stent data show shift in physician preferences.**

[No authors listed]

Hosp Mater Manage. 2007 Sep;32(9):8-9. No abstract available. PMID: 17896550 [PubMed - indexed for MEDLINE]



International Journal of Technology Assessment in Health Care, 25:4 (2009), 455–462.
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doi:10.1017/S0266462309990389

The feasibility of harmonizing health technology assessments across jurisdictions: A case study of drug eluting stents

Paul Trueman, Manjusha Hurry, Matthew Bending, John Hutton
University of York



THE UNIVERSITY of York



About Us

The York Health Economics Consortium (YHEC) at the University of York was established in 1986. The Consortium was established in recognition of the increasing application of economic principles to healthcare, with the intention of providing economic support to organisations within the National Health Service.

Over time, the range of services offered by the Consortium has expanded to incorporate health technology assessment, health service reviews and a wider range of applied health services research. Whilst YHEC continues to work with a range of healthcare providers and commissioners at a local and regional level, our client base has expanded to include national bodies such as the Department of Health, the National Audit Office, NICE and other health related organisations.

Our work in health technology assessment has expanded rapidly due to demand from the pharmaceutical and medical device sectors. YHEC has long-standing relationships with a number of global pharmaceutical companies, having developed analyses to support pricing, reimbursement and market access throughout Europe and beyond. We also have extensive experience of working with medical device manufacturers and understand the challenges that occur in the development of rapidly evolving technologies.

YHEC is entirely owned by the University of York and remains a constituent part of the university health and social research departments which include the Centre for Health Economics, the Centre for Reviews & Dissemination and the Department of Health Sciences.

Protocollo di studio



Obiettivi

Determinare il grado con cui i rapporti di HTA convergono:

- nell'approccio
- nell'evidenze considerata
- nelle raccomandazioni finali

Protocollo di studio

1. Selezione dei report HTA

- **HTA report elaborati dopo il 2006, in modo che siano incluse le evidenze relative all'efficacia a lungo termine**
(Ong AT et al. J Am Coll. Cardiol. 2005; 45: 2088-2092)
 1. The Liverpool Reviews and Implementation group (LRIG) commissionato dal NICE
 2. The Belgian healthcare Knowledge Centre Belgium (KCE)
 3. The Ludwig Boltzmann Institute, Austria (LBI)
 4. Programme for Assessment of technology in health (PATH), Ontario, Canada

NB: NICE e PATH hanno correlazione diretta con il rimborso/raccomandazioni della Tecnologia nei SSN, LBI e KCE non hanno diretta correlazione con rimborso, ma indirizzo per la miglior pratica clinica

Protocollo di studio

2. Valutazione dei report



Sviluppato uno specifico framework per valutare in modo sistematico le informazioni relative a:

- Scopo del report HTA
- Numero e tipologia degli studi clinici inclusi
- Altre fonti di evidenza prese in esame
- End point clinici considerati
- Numero e tipologia di studi economici considerati
- End point economici considerati
- Raccomandazioni sull'utilizzo della tecnologia
- Stima dell'impatto sul budget della raccomandazione, quando disponibile

Risultati: le evidenze cliniche

Core set di 7 RCT in comune

Harmonizing health technology assessments

Table 1. Clinical Evidence Considered

Agency	Type of clinical study	RCTs (DES vs BMS)	Non-RCTs	RCTs (DES vs DES)	Papers on published registries	Meta-analysis from literature	Source	Assessment of clinical effectiveness
NICE	RCTs, Non-RCTs	16	5	8	32	No	Published, manufacturer's submission and unpublished sources such as conference abstracts and presentations	Meta-analysis
KCE	RCTs	24	None	1	29	Yes	Literature	Meta-analysis from literature
PATH	RCTs	9	None	1	13	No	Literature	Meta-analysis both RCTs and registry data
LBI HTA	RCTs	17	None	1	0	1	Literature	Meta-analysis from literature

RCT, randomized controlled trial; DES, drug eluting stents; BMS, bare metal stents; NICE, National Institute for Clinical Excellence; KCE, The Belgian Health Care Knowledge Centre; PATH, Programme for Assessment of Technology in Health; LBI, The Ludwig Boltzmann Institute; HTA, health technology assessment.

Risultati: end-points

In comune:

- Mortalità ad un anno
- Infarto al miocardio
- Target lesion revascularization
- Eventi avversi correlati al device



NICE: ulteriori quattro end-point

Conclusioni:

- LBI: Sirolimus eluting stent potrebbe portare ad un aumento della mortalità non cardiaca
- Altre agenzie: non vi è differenza tra DES e BMS
- KCE: Sirolimus eluting stent minori infarti miocardio vs paclitaxel eluting stent

NB: differenze nelle valutazioni di fonti non pubblicate e dei registri nazionali

Questi registri includevano un numero di casi che variava da 2.000 a 20.000. I dati provenienti dai registri sono stati utilizzati come fonte d'informazione supplementare ai trial pubblicati che prendevano in esame un campione eterogeneo e spesso non trasferibile in un contesto locale.

I registri hanno inoltre fornito dati su outcome a lungo termine e la quota di reintervento

Risultati: le evidenze economiche

Studi molto eterogenei!

Table 2. Summary of the Economic Evaluations Considered by the Assessment Groups

Countries	Price difference (DES vs BMS)	Outcome measures	Source of health outcomes	CE ratio (cost/QALY)	CE ratio (cost/revascularization avoided)	Conclusion
UK (2)	£500–£520	QALY	ARTS/SoS Trial	£30,600–£1,099,000		CE in small minority of patients who are at high risk.
US (3)	£1000–£1200	RR/RRA, TVR	Stent-PAMI, database, RCTs	£18,500–£26,700	£339	CE for high risk patients
Canada (5)	£540–£860	QALY, TLR, RR	ARTS, meta-analysis, APPROACH	£26,900–£114,950	£3100–£4900	CE for high risk patients
Europe (8)	£450–£950	Death, TLR, MACE, RA, TVR	RCTs, ARTS, APPROACH	£3,000–£49,700	£287–£18,400	CE for high risk groups
Australia (1)	£650	QALY	APPROACH	£19,000–£32,000	£1500–£2500	Inconclusive

DES, drug eluting stent; BMS, bare metal stent; CE, cost-effectiveness; QALY, quality-adjusted life-year; UK, United Kingdom; US, United States; RR, repeat revascularization; RRA, repeat revascularization avoided; RA, revascularization avoided; TVR, target vessel revascularization; TLR, target lesion revascularization; MACE, major adverse cardiac events; RCT, randomized controlled trial

Dipende dalle caratteristiche dei pazienti considerati

Table 3 summarizes the key findings from the economic evaluations. Despite significant differences and very wide confidence intervals around the cost-effectiveness ratios, the interpretation of the economic evaluations is broadly similar across the agencies, with DES being economically justified only for high-risk individuals. However, there remain some differences in the definition of high-risk individuals.

Table 3. Summary

Agency	Price difference (DES vs BMS)	Source of health outcomes	CE ratio (cost/QALY)	(cost/revascularization avoided)	Conclusion
KCE	£670–£1010	Registry and meta-analysis, ARTS	€860,000–> €3M	—	There is no good economic justification of implant DES in patients currently receiving BMS.
NICE	£620–£720	Registry Cardiothoracic centre Liverpool, RCTs, ARTS	£182,000–£562,000	—	DES is not cost-effective for the whole population. They may be CE for specific subgroups.
PATH	£550	ARTS Trial (QALY). CARDIACCESS REGISTRY	\$63,000–>\$1M	\$2,630 – DES dominated	DES may be cost-effective in very high-risk populations at lower prices
LBI	£509	DAHTA (Gorenoi meta-analyses results)	—	€3,464	Cost per revascularization is within accepted range of <US\$10,000.

DES, drug eluting stent; BMS, bare metal stent; CE, cost-effectiveness; QALY, quality-adjusted life-year; KCE, The Belgian Health Care Knowledge Centre; NICE, National Institute for Clinical Excellence; PATH, Programme for Assessment of Technology in Health; LBI, The Ludwig Boltzmann Institute; DAHTA, German Agency for Health Technology Assessment.

Recommendations

Despite differences in the clinical evidence considered, the patient populations considered and using different sources of health outcomes data, agencies nonetheless came to fairly similar conclusions. NICE, PATH, and LBI all identify high-risk patient groups who could benefit most from DES in their recommendation. KCE came to a more negative conclusion which advocates clearly that DES should not be reimbursed. Table 4 summarizes the recommendations made following the appraisal of the HTA of DES compared with BMS.

Conclusioni

- Tutte le valutazioni hanno preso in considerazione un comune *core data set* di evidenze cliniche ed economiche
- Queste evidenze hanno un ***limitato impatto sulla raccomandazione***
- ***Evidenze generate localmente*** (es. registri) sono risultate parte essenziale per la formulazione della raccomandazione finale
- L'analisi suggerisce che vi sono elementi:
 - ❖ indipendenti dal contesto locale (es. considerazioni su efficacia e sicurezza)
 - ❖ altri dipendenti dal contesto considerato (es. analisi costo-efficacia, implicazioni sull'organizzazione e sul budget)

APPLICAZIONE PRATICA ?



- Nelle nostra realtà siamo costretti a prendere decisioni tempestive
- Lavoro *quick and dirty*
- Ricerca da fonti secondarie possono dare anche esiti discordanti



Esempi di valutazioni

Caso 1: HAS francese

- INTEGRA, matrice per la rigenerazione del derma
- Terapia a pressione negativa

HAS

HAUTE AUTORITÉ DE SANTÉ
COMMISSION D'ÉVALUATION DES PRODUITS ET PRESTATIONS
AVIS DE LA COMMISSION
27 mai 2008

Maggio 2008 - Integra viene incluso nelle liste di rimborsabilità **solo** per il trattamento di:

1. ustioni gravi (3° grado)
2. perdite importanti di sostanza cutanea nel caso in cui i trattamenti tradizionali (autoinnesti, alloinnesti) non siano disponibili, indicati o accettati dal paziente

Suffisant en raison de :

Service Attendu (SA) :

- l'intérêt thérapeutique d'une greffe classique (autogreffe ou allogreffe) n'est pas disponible, n'est pas techniquement possible ou présente d'importantes chances d'échec (en termes de prise de greffe ou de rétraction importantes, selon la localisation).
- l'intérêt de santé publique, compte tenu de la gravité de la pathologie et de l'existence de besoins non couverts

Indications :

- brûlures graves, du 3^{ème} degré, après excision lorsqu'une autogreffe adéquate ou de taille suffisante ne peut être effectuée.
- pertes de substance cutanée totale, après excision, lorsqu'une autogreffe adéquate ne peut être effectuée et quand l'expansion cutanée n'est pas recommandée ou acceptée par le patient (notamment lors de séquelles de brûlures ou de rétraction).

Traitement des plaies par pression négative (TPN) : des utilisations spécifiques et limitées

Les systèmes de traitement des plaies par pression négative (TPN) sont des adjuvants de la cicatrisation de certaines plaies chirurgicales à haut risque de complications ou de certaines plaies chroniques ne cicatrisant pas en première intention. Ils sont utilisés jusqu'à obtention d'un tissu de granulation ou de conditions suffisantes pour un geste chirurgical.

Du fait de l'absence d'étude clinique de bon niveau de preuve, l'évaluation de la Haute Autorité de Santé (HAS) est essentiellement fondée sur l'expertise d'un groupe de travail multidisciplinaire composé de professionnels de santé. La HAS a tenu compte de l'intérêt potentiel de la technique chez certains patients soigneusement sélectionnés.

L'ESSENTIEL

- Le TPN consiste à placer la surface d'une plaie sous une pression inférieure à la pression atmosphérique ambiante. Pour cela, un pansement spécialement réalisé est raccordé à une source de dépression et à un système de recueil des exsudats.
- La HAS a retenu pour le TPN des utilisations limitées dans des **situations cliniques ciblées**.
- Le recours au TPN ne doit intervenir qu'après avoir envisagé, et selon les cas essayé, des traitements conventionnels. On tiendra compte des inconvénients de la technique et des contre-indications, précautions d'emploi et effets indésirables mentionnés dans les notices d'instructions.
- Un **objectif clair** en termes d'évolution de la plaie doit être fixé à l'instauration du TPN et assorti d'un suivi rigoureux de cette évolution. En l'absence d'amélioration lors de deux changements de pansement consécutifs ou à l'issue d'une semaine d'utilisation, le traitement doit être arrêté.
- De plus, le TPN doit respecter des conditions d'emploi précises.
 - Il exige une **formation spécifique** de tous les soignants.
 - L'**information du patient** sur l'objectif du traitement, ses effets indésirables et ses contraintes est nécessaire.
 - Le TPN doit être **prescrit après avis spécialisé** (chirurgien plasticien, dermatologue, diabétologue...) et **commencé dans un établissement de santé** (il peut ensuite être poursuivi en hospitalisation à domicile, avec évaluation hebdomadaire par le prescripteur initial).
 - La durée maximale de prescription recommandée est de **30 jours**, renouvelable une seule fois par le prescripteur initial.
- Il n'y a pas d'argument clinique pour distinguer entre eux les différents dispositifs disponibles sur le marché.

"Per l'assenza di studi clinici con buoni livelli di prova, la valutazione dell'Haute Autorité de Santé (HAS) è fondata principalmente su l'esperienza di un gruppo di lavoro multidisciplinare composto da professionisti della salute"

"In assenza di un miglioramento ad una settimana dall'inizio della terapia, il trattamento deve essere interrotto"

[...]. La prescrizione deve essere fatta da uno specialista (chirurgo plastico, dermatologo, diabetologo,..) e va avviata all'interno di una struttura sanitaria (possibilità di prosecuzione a domicilio con valutazione settimanale da parte del prescrittore iniziale). La durata massima di terapia raccomandata è di 30 giorni, rinnovabile una sola volta da parte del prescrittore iniziale"

"Non ci sono evidenze cliniche per suggerire una marca commerciale rispetto ad un'altra"

Caso 2: NICE britannico

- **CANALOPLASTICA:** tecnica innovativa per il trattamento del glaucoma primario ad angolo aperto

Issue date: May 2008

NHS
National Institute for
Health and Clinical Excellence

Canaloplasty for primary open-angle glaucoma

1 Guidance

- 1.1 Current evidence on the safety and efficacy of canaloplasty for primary open-angle glaucoma is inadequate in both quality and quantity. Therefore, this procedure should only be used in the context of research or formal prospective data collection. Clinicians are encouraged to collaborate in the collection and publication of data.
- 1.2 Further publication of safety and efficacy outcomes will be useful. The Institute may review the procedure upon publication of further evidence.

2 The procedure

- 2.1 Indications and current treatments
- 2.1.1 Glaucoma describes a group of conditions in which there is progressive damage to the optic nerve. It is often associated with an abnormal rise in intraocular pressure. Normal intraocular pressure helps the eye to keep its shape and is maintained by the production and drainage of aqueous humour. Schlemm's canal, the main drainage channel for aqueous humour, is situated in the angle between the iris and the cornea. In primary open-angle glaucoma, the most common type of glaucoma, the outflow of aqueous humour via Schlemm's canal is not obstructed by the peripheral iris. The early stages of primary open-angle glaucoma are usually asymptomatic, but loss of peripheral and central vision occurs over time.
- 2.1.2 Treatment for glaucoma aims to lower the intraocular pressure. In primary open-angle glaucoma, treatment is usually with drugs, delivered as eye drops. If these are inadequate then surgical trabeculectomy, or sometimes laser trabeculoplasty, may be used. Trabeculectomy involves creating a new drainage passage for

2.2 Outline of the procedure

- 2.2.1 Canaloplasty is a non-penetrating surgical technique for glaucoma which aims to restore the natural drainage of fluid from the eye. Canaloplasty may be performed under local or general anaesthetic. A superficial hinged flap of sclera is made and a deeper flap excised, exposing Schlemm's canal. A microcatheter with an illuminated tip is introduced into the canal and advanced around its entire circumference. As the catheter tip advances, viscoelastic fluid is injected into the canal to dilate it. After catheterisation of the entire canal length is complete, a suture is tied to the tip of the microcatheter, which is withdrawn, pulling the suture into the canal. The suture is cut from the microcatheter and tied in a loop encircling the inner wall of the canal. The suture is tightened, so distending the trabecular meshwork with the aim of widening the canal. The superficial flap is sutured. A special ultrasound imaging system is used to help identify the canal and to visualise the instruments in the canal before, during and after the surgery.

Sections 2.3 and 2.4 describe efficacy and safety in the published literature considered in this procedure. For details of evidence.

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2.4.2 In the same case series, the loss of two or more lines of best corrected visual acuity was reported in 25% (18/71) of patients at 1-month follow-up, 7% (5/68) of patients at 3-month follow-up and 9% (4/47) of patients at 12-month follow-up. The authors noted that the decline in visual acuity in these patients was not associated with

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5 003 7763 or email publications@nice.org.uk and quote reference number N1576 for 'standing NICE guidance'.

Institute, which was arrived at after careful consideration of the available evidence. It should be taken fully into account when exercising their clinical judgement. This guidance does not absolve the responsibility of healthcare professionals to make appropriate decisions in the circumstances of the patient and/or guardian or carer.

responsibility of local commissioners and/or providers. Commissioners and providers are encouraged to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to promote equality of opportunity. Nothing in this guidance should be interpreted in a way that conflicts with those duties.

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NHS
Quality
Improvement
Scotland

Interventional procedure guidance 260

Interventional procedure guidance makes recommendations on the safety and efficacy of a procedure. The guidance does not cover whether or not the NHS should fund a procedure. Decisions about funding are taken by local NHS bodies (primary care trusts and hospital trusts) after considering the clinical effectiveness of the procedure and whether it represents value for money for the NHS.

Interventional procedure guidance is for healthcare professionals and people using the NHS in England, Wales, Scotland and Northern Ireland. This guidance is endorsed by NHS QIS for implementation by NHS Scotland.

Guidance

1.1 "Le evidenze disponibili a supporto di sicurezza ed efficacia della canaloplastica nel trattamento del glaucoma primario ad angolo aperto risultano inadeguati dal punto di vista qualitativo e quantitativo. Pertanto la procedura dovrebbe essere impiegata solo nell'ambito della ricerca o in un contesto di raccolta prospettica dei dati. I clinici sono incoraggiati a raccogliere e pubblicare i dati ottenuti.

1.2 "E' auspicabile la pubblicazione di ulteriori dati di sicurezza ed efficacia".



***GRAZIE PER
L'ATTENZIONE!***