CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE

CONTROVERSIES & UPDATES IN VASCULAR SURGERY

JANUARY 23-25 2014

MARRIOTT RIVE GAUCHE & CONFERENCE CENTER PARIS, FRANCE

For CLI: Choose well…Jedi

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Disclosure

Speaker name: Firas F Mussa, MD

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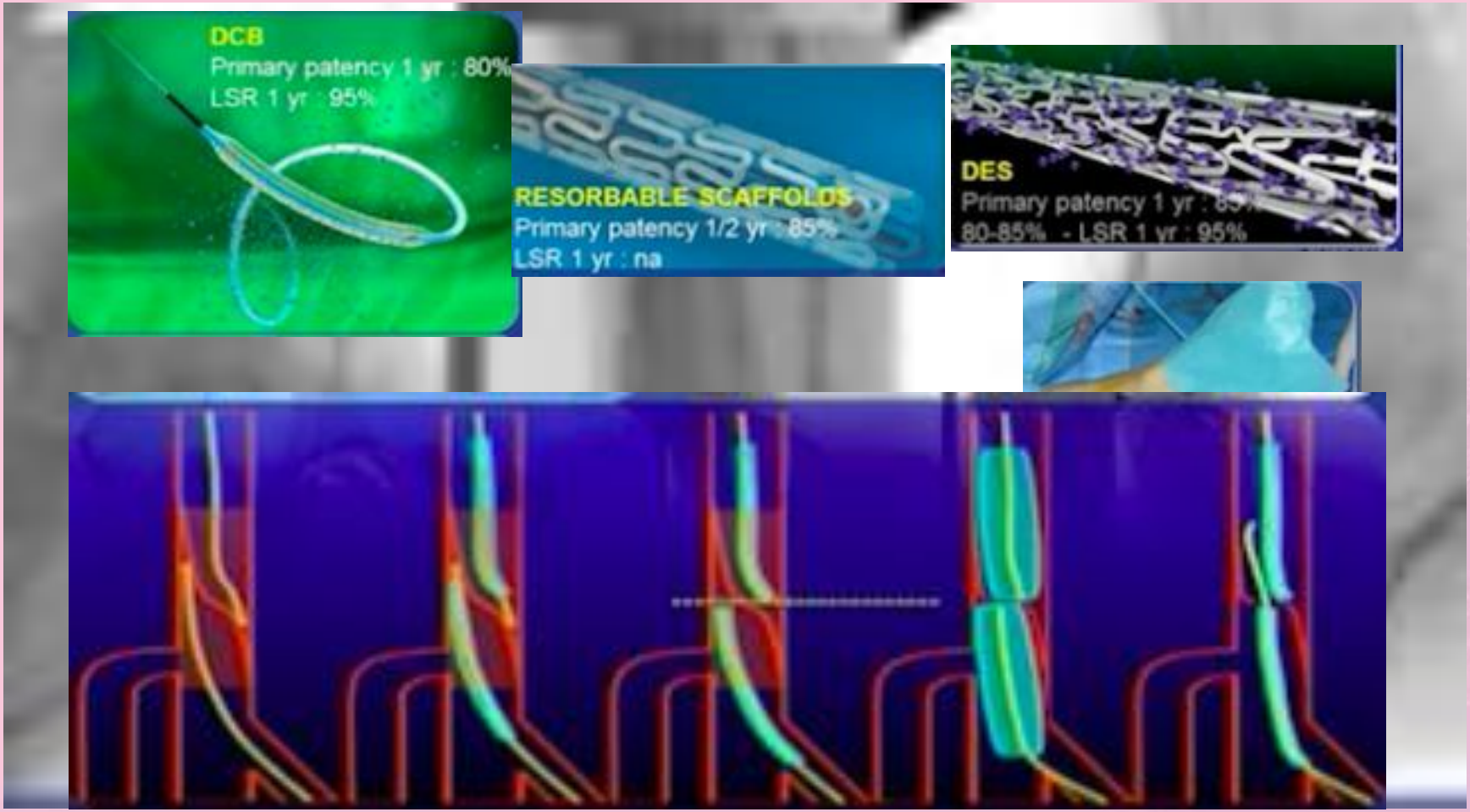
- ☐ I have the following potential conflicts of interest to report:
- ☐ Consulting
- ☐ Employment in industry
- ☐ Shareholder in a healthcare company
- ☐ Owner of a healthcare company
- ☐ Other(s)
- X I do not have any relavant conflict of interest

THE LANCET

- BASIL: CLI patient **who would live >2 years** and have a usable vein→ bypass
- Endo was associated with high failure rate
- And secondary bypass after failed endo is BAD!!

since then: a lot has happened



Endovascular-first approach is not associated with worse amputation-free survival in appropriately selected patients with critical limb ischemia

Karan Garg, MD, Patrick A. Kaszubski, BS, Rameen Moridzadeh, BS, Caron B. Rockman, MD, Mark A. Adelman, MD, Thomas S. Maldonado, MD, Frank J. Veith, MD, and Firas F. Mussa, MS, MD, *New York, NY*

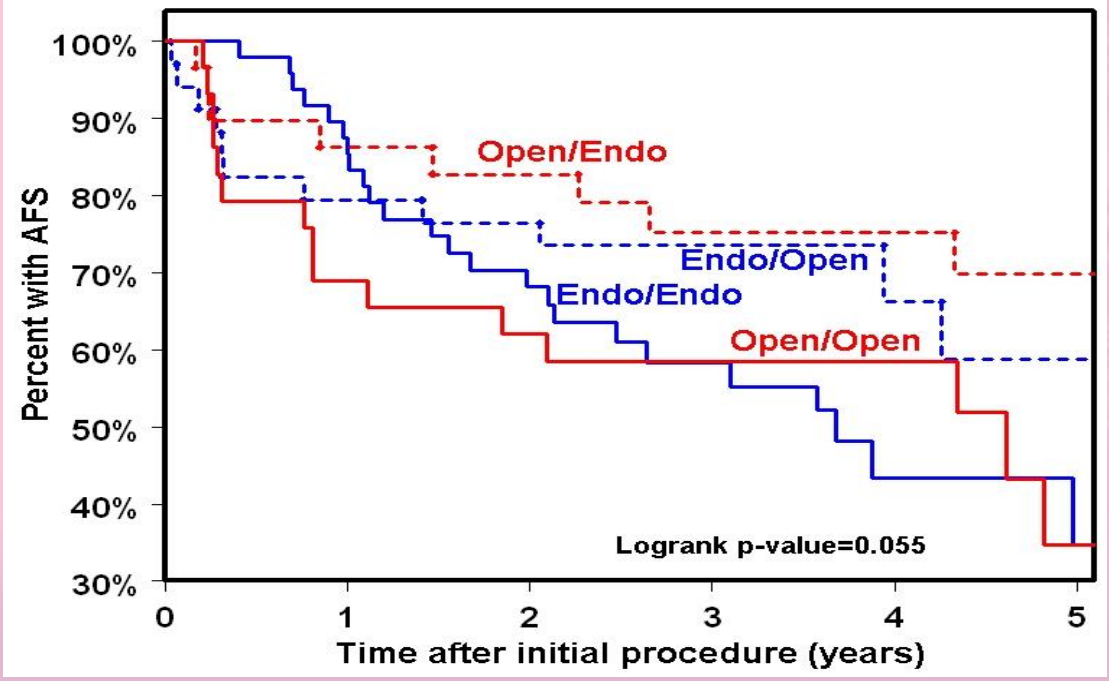
Objective: Endovascular interventions for critical limb ischemia are associated with inferior limb salvage (LS) rates in most randomized trials and large series. This study examined the long-term outcomes of selective use of endovascular-first (endo-first) and open-first strategies in 302 patients from March 2007 to December 2010.

Methods: Endo-first was selected if (1) the patient had short (5-cm to 7-cm occlusions or stenoses in crural vessels); (2) the disease in the superficial femoral artery was limited to TransAtlantic Inter-Society Consensus II A, B, or C; and (3) no impending limb loss. Endo-first was performed in 187 (62%), open-first in 105 (35%), and 10 (3%) had hybrid procedures.

Results: The endo-first group was older, with more diabetes and tissue loss. Bypass was used more to infrapopliteal targets (70% vs 50%, $P = .031$). The 5-year mortality was similar (open, 48%; endo, 42%; $P = .107$). Secondary procedures (endo or open) were more common after open-first (open, 71 of 105 [68%] vs endo, 102 of 187 [55%]; $P = .029$). Compared with open-first, the 5-year LS rate for endo-first was 85% vs 83% ($P = .586$), and amputation-free survival (AFS) was 45% vs 50% ($P = .785$). Predictors of death were age >75 years (hazard ratio [HR], 3.3; 95% confidence interval [CI], 1.7-6.6; $P = .0007$), end-stage renal disease (ESRD) (HR, 3.4; 95% CI, 2.1-5.6; $P < .0001$), and prior stroke (HR, 1.6; 95% CI, 1.03-2.3; $P = .036$). Predictors of limb loss were ESRD (HR, 2.5; 95% CI, 1.2-5.4; $P = .015$) and below-the-knee intervention ($P = .041$). Predictors of worse AFS were older age (HR, 2.03; 95% CI, 1.13-3.7; $P = .018$), ESRD (HR, 3.2; 95% CI, 2.1-5.11; $P < .0001$), prior stroke ($P = .0054$), and gangrene ($P = .024$).

Conclusions: At 5 years, endo-first and open-first revascularization strategies had equivalent LS rates and AFS in patients with critical limb ischemia when properly selected. A patient-centered approach with close surveillance improves long-term outcomes for both open and endo approaches. (J Vasc Surg 2013;■:1-8.)

Management and outcomes of failed revascularization using a selective endovascular-first strategy for critical limb ischemia. Garg K, Mussa FF et al.
SCVS 2014



Cost-eff… …ment

WTP 50.000-100.000/QALY

With an ICER of **$47,735/QALY**, an initial surgical bypass with subsequent endovascular revision(s) was the most cost-effective. Endovascular-first management had a higher cost **(ICERs ≥$121,010/QALY).**

Endovascular management did become cost-effective when the initial **wound healing rate was >37%** or when procedural **costs were decreased by >42%.**

…did become cost-eff… …ecreased by >42%. Primary amputat… …one).
Conclusions: Contempora… …surgical bypass is the most cost-effective alternative to loca… …CLI with tissue loss and can be supported even in a cost-averse health care environment. (J Vasc S… …1015-24.)

The Society for Vascular Surgery Lower Extremity Threatened Limb Classification System: Risk stratification based on Wound, Ischemia, and foot Infection (WIfI).

Mills et al. J Vasc Surg. 2014 Jan;59(1):220-234

It has become increasingly difficult to perform meaningful outcomes analysis for patients with threatened limbs using Fontaine and Rutherford Systems

Risk stratification is based on three major factors that impact amputation risk: Wound, Ischemia, and foot Infection (WIfI).

When Endo is bad

- Patient related: unrelaible, renal impairment, can't tolerate antiplatelets
- Anatomy: access, small vessels with multilevel disease, CTO of popliteal and trifurcation
- System: poor endo expertise or insurance issues

vascularnews

Top stories

Another blow for renal denervation as Covidien ends OneShot renal denervation programme

Covidien has announced that because of a slower than expected development of the renal denervation market, it is voluntarily exiting its OneShot renal denervation programme. Read more...

Low-dose Lutonix drug-eluting balloon shows lower late lumen loss than plain angioplasty at six months

Treatment of femoropopliteal lesions with the device reduces late lumen loss with safety comparable to that of control angioplasty, according to LEVANT I trial results published in *JACC: Cardiovascular Interventions*. Read more...

When bypass is best??!!

- Long, calcified, multi-level disease
- Large tissue loss
- Distal target ok
- In cases of Endo-fail (technical, non healing, repeated intervention, mounting cost…)→ need further work→ may be those who have veins, good target and going to live >2 years

BEST

- The BEST-CLI Trial (Randomized, Multicenter, Controlled Trial to Compare **B**est **E**ndovascular versus Best **S**urgical **T**herapy in Patients with **C**ritical**L**imb **I**schemia) has been funded by the NHLBI and will begin enrollment in Q2 2014
- will randomize 2100 patients with CLI secondary to infrainguinal occlusive disease at approximately 120 sites in the US and Canada to either surgical bypass (all conduits allowed) or endovascular treatment
- It will be a 4.25 year trial, with target enrollment beginning in March, 2014 and each patient having at least 2 years of follow up.
- Primary end points: mortality, limb loss and reintervention rates
- Secondary end points: CEA and QOL

Conclusions

- I am an endovascular believer and practitioner
- There are negative consequences for non-selective use of endo-first approach
- Need to choose individually based on patient, anatomical, wound, functional status
- DO NOT DENY PATIENTS A HIGH QUALITY BYPASS BECAUSE THEY ARE SICK OR YOU THINK IT'S A BIG OPERATION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