ILIAC ARTERY ENDOFIBROSIS IN HARD CORE CYCLISTS

IS ENDOVASCULAR THERAPY EFFECTIVE, OR IS SURGERY THE ONLY EFFECTIVE TREATMENT?
WHAT SHOULD OPERATIVE TREATMENT BE?

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DISCLAIMER
I have no conflicts of interest

“ENDOFIBROSIS”
MISNOMER
THE PROCESS INVOLVES ALL 3 LAYERS.
IT IS AN ARTERIOPATHY

• KRAL ET AL, JV5, 2002

ENDOVASCULAR ANGIOPLASTY AND STENTING INEFFECTIVE

NO MID-TERM DATA; RECURRENCE IN 8 WEEKS
MAY CAUSE DISSECTION
DOES NOT TREAT ABNORMAL LENGTH
STENT MIGRATION AND FRACTURE
IN-STENT STENOSIS

Peach, Schep, Palfreeman, Beard, Thompson, and Hinchliffe
Eur. J. Vas and Endovas Surgery, 2011
ENDOVASCULAR

BECAUSE ALL LAYERS ARE INVOLVED:
THE ENTIRE ARTERY, NOT JUST THE LUMEN, IS SMALL AND STENOTIC

“Coke Bottle” Appearance
— Angioplasty only adds to trauma
— Angioplasty can compromise Hypogastric Artery

SURGERY

THE REALISTIC THERAPEUTIC OPTION:
• Patch Angioplasty
  Localized Early Lesions
• Graft Replacement
  Full length External Iliac Stenoses
  Occlusions

SURGERY

BEST GRAFT MATERIAL NOT DETERMINED
— Vein
— Cryopreserved Conduit
— Homograft
— Bovine Graft
— PTFE
— Polyester
WE FAVOR POLYESTER
SURGERY

MOST FREQUENT PROBLEM IS INTIMAL HYPERPLASIA
LITTLE LATITUDE IN LENGTH OF GRAFT
IF GRAFT TOO LONG, KINKING POSSIBLE
IF GRAFT TOO SHORT, INTIMAL HYPERPLASIA AT DISTAL SITE

85% EXPECTED IMPROVEMENT
EVEN "MINOR" RESTENOSIS (30%) CLINICALLY SIGNIFICANT
IN THESE HIGH PERFORMANCE ATHLETES WITH MASSIVE STROKE VOLUMES AND HUGE OXYGEN DEMANDS