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الرقم القومي

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**Femoro popliteal bypass Vs angioplasty
in TASC D lesion in endovascular ERA.
Is it time to change the TASC
recommendations?**

*Thesis submitted for partial fulfillment of M.D degree in
vascular surgery*

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*First of all, thanks to "Allah" who enabled me to finish
this piece of work,*

*I would like to extend this work to my father, my beloved mother
for their daily support and prayer.*

*I would like to express my deep appreciation and thanks to the
eminent **Prof: Tarek Ahmed Abd El-Azim** Professor of general and
vascular surgery, Faculty of Medicine, Ain Shams University, for his
continuous support, valuable time and guidance throughout this work. It
is a great honor and a chance of lifetime to be supervised by him. I would
like also to express my deep thanks & appreciation to **Prof: Mostafa
Soliman Mahmoud**, Professor of general and vascular surgery, Faculty of
Medicine, Ain Shams University, for his kind help and assistance. The
knowledgeable scientist for whom no words of praise are sufficient.*

*My deep thanks to **Dr. Mohamed Ismail Mohamed**, Lecturer of
General and vascular Surgery, Faculty of Medicine, Ain Shams University
for his aid and precious remarks.*

*Lastly, I would also like to express my warm feelings to all the staff
members of Vascular Surgery department, Faculty of Medicine, Ain
Shams University for their continuous encouragement.*

Ahmed Refaat El- Gendi

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List of Abbreviations

CFA	Common femoral artery
SFA	Superficial femoral artery
PFA	Profunda femoris artery
ATA	Anterior tibial artery
PTA	Posterior tibial artery
PA	Peroneal artery
SMC_s	Soomth muscle cells
EC_s	Endothelial cell
ECM	Extra cellular matrix
IEL	Interal elastic lamina
PAD	Peripheral arterial occlusive disease
ABI	Ankle brachial index
LDL	Low dinesty lipopioein
CLI	Critical limb ischemia
TM	Treadmill
AP	Ankle pressure
TP	Toe pressure
PSV	Peak systolic velocity
EDV	End diastolic velocity
CTA	Computed tomography angiography
CAD	Coronary artery diseaes
CLTI	Chronic limb threateninig ischemia
GSV	Great saphenous vein
TASC	Trans atlantic society consensus
C.B	Cutting balloon
ISR	In stent restenosis
CTo	Chronic total occlusion
IVUS	Intravascular ultrasound
EF	Ejection fraction
FI	Foot infection
CIN	Contrast induced nephropathy

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Aim of the study

Aim of the study

Is to discuss whether patients with CLI due to TASC D lesion will still best managed with femoropopliteal bypass or can be managed by balloon angioplasty that much decreases postoperative morbidities especially with appearance of new advances in endovascular techniques.

Review of Literature

I. Surgical Anatomy of the lower limb arterial systems

The artery which supplies the greater part of the lower extremity is the direct continuation of the external iliac (figure 1). It runs as a single trunk from the inguinal ligament to the lower border of the popliteus, where it divides into two branches, the anterior and posterior tibial. The upper part of the main trunk is named the femoral, the lower part is popliteal (*Gray, 1990*).

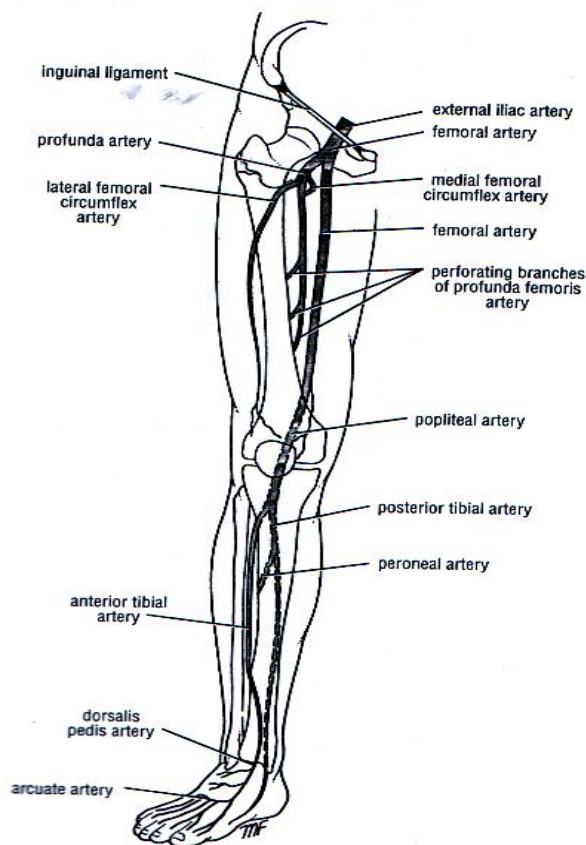


Fig. (1): Major arteries of the lower limb (*Quoted from Richard, 1993*).

The common femoral artery enters the thigh by passing behind the inguinal ligament, here it lies midway between the anterior superior iliac spine and the symphysis pubis, it divided ۲ to ۵ cm below the inguinal ligament into ۲ major branches; the profunda femoris artery and the superficial femoral artery which descends almost vertically toward the adductor tubercle of the femur and ends at the opening of the adductor magnus muscle by entering popliteal space as supragenicular popliteal artery (*Richard et al, ۲۰۰۳*).

The branches of the common femoral artery are superficial epigastric, deep external, superficial iliac circumflex, muscular, superficial external pudendal and highest genicular arteries (*Gray, ۲۰۰۵*).

The profunda femoris artery is a large vessel arising from the lateral and back part of the femoral artery, from ۲ to ۵ cm below the inguinal ligament. At first it lies lateral to the femoral artery; it then runs behind it and the femoral vein to the medial side of the femur and passing downward behind the adductor longus, ends at the lower third of the thigh in a small branch, which pierces the adductor magnus, and is distributed on the back of the thigh to the hamstring muscles. The terminal part of the profunda is sometimes named the fourth perforating artery. The