Functional outcome of hypogastric revascularisation for prevention of buttock claudication in patients with peripheral artery occlusive disease

Titre	Functional outcome of hypogastric revascularisation for prevention of buttock claudication in patients with peripheral artery occlusive disease
Type de publication	Article de revue
Auteur	Paumier, A. [1], Abraham, Pierre [2], Mahé, Guillaume [3], Maugin, E. [4], Enon, B. [5], Lefthériotis, Georges [6], Picquet, Jean [7]
Editeur	Elsevier
Type	Article scientifique dans une revue à comité de lecture
Année	2010
Langue	Anglais
Date	2010
Numéro	3
Pagination	323 - 329
Volume	39
Titre de la revue	European Journal of Vascular and Endovascular Surgery
ISSN	1532-2165
Mots-clés	Aged [8], Angioplasty, Balloon/adverse effects [9], Arterial Occlusive Diseases/blood/complications/physiopathology/surgery/therapy [10], Blood Gas Monitoring, Transcutaneous [11], Buttocks/blood supply [12], Constriction, Pathologic [13], Exercise Test [14], Exercise Tolerance [15], Female [16], Humans [17], Iliac Artery/physiopathology/surgery [18], Intermittent Claudication/blood/etiology/physiopathology/prevention & control [19], Ischemia/blood/etiology/physiopathology/surgery/therapy [20], Male [21], Middle Aged [22], Oxygen/blood [23], Pelvis/blood supply [24], Recovery of Function [25], Retrospective Studies [26], Time Factors [27], Treatment Outcome [28], Vascular Patency [29], Vascular Surgical Procedures/adverse effects [30]

Résumé en anglais	We have defined proximal lower limb ischaemia as a decrease in Exercise-transcutaneous oxygen pressure (TcPO(2)) lower than minus 15mmHg at the buttock level in patients with peripheral artery occlusive disease. The purpose of this study was to objectively evaluate the benefits of direct versus indirect revascularisation of internal iliac arteries (IIAs) for prevention of buttock claudication in this population. We retrospectively reviewed the charts of proximal ischaemia patients who underwent revascularisation and both preoperative and postoperative stress TcPO(2) testing. Revascularisation procedures were classified as either direct revascularisation, including percutaneous transluminal angioplasty and internal iliac artery bypass, resulting in a direct inflow in a patent IIA (group 1) or indirect revascularisation, including aortobifemoral bypass and recanalisation of the femoral junction on the ischaemic side, resulting in indirect inflow from collateral arteries in the hypogastric territory (group 2). Patency was checked 3 months after revascularisation in all cases. Treadmill exercise stress tests were performed before and after revascularisation using the same protocol designed to assess pain, determine maximum walking distance (MWD) and measure TcPO(2) during exercise. In addition, ankle-brachial indices (ABIs) were calculated. Between May 2001 and March 2008, a total of 93 patients with objectively documented proximal ischaemia underwent 145 proximal revascularisation procedures using conventional open techniques in 109 cases and endovascular techniques in 36. Direct revascularisation was performed on 50 limbs (35%) (group 1) and indirect revascularisation on 95 limbs (65%) (group 2). The mean interval between revascularisation and stress testing was 60+/-74 days preoperatively and 149+/-142 days postoperatively. No postoperative thrombosis was observed. Buttock claudication following revascularisation was more common in group 2 ($p<0.001$). No difference was observed between the two groups with regard to improvement in MWD (365 / 294 m) and ABI (0.20/0.22). Disappearance of proximal ischaemia was more common after direct revascularisation ($p<0.01$). The extent of lesions graded according to the TASC II classification appeared not to be predictive of improvement in assessment criteria following revascularisation. Conversely, patency of the superficial femoral artery was correlated with improvement ($p<0.01$). This study indicates that direct revascularisation, if feasible, provides the best functional outcome for prevention of buttock claudication.
URL de la notice	http://okina.univ-angers.fr/publications/ua8256 [31]
DOI	10.1016/j.ejvs.2009.10.009 [32]
Lien vers le document	http://dx.doi.org/10.1016/j.ejvs.2009.10.009 [32]
Titre abrégé	Eur J Vasc Endovasc Surg

Liens

[1] http://okina.univ-angers.fr/publications?f[author]=13979
[2] http://okina.univ-angers.fr/pierre.abraham/publications
[3] http://okina.univ-angers.fr/publications?f[author]=1153
[4] http://okina.univ-angers.fr/publications?f[author]=13980
[5] http://okina.univ-angers.fr/publications?f[author]=13981
[6] http://okina.univ-angers.fr/g.leftherl/publications
[7] http://okina.univ-angers.fr/j.picquet/publications
[8] http://okina.univ-angers.fr/publications?f[keyword]=1072
[9] http://okina.univ-angers.fr/publications?f[keyword]=13287
[10] http://okina.univ-angers.fr/publications?f[keyword]=13289
[11] http://okina.univ-angers.fr/publications?f[keyword]=12902
[12] http://okina.univ-angers.fr/publications?f[keyword]=13290

[13] http://okina.univ-angers.fr/publications?f[keyword]=13291
[14] http://okina.univ-angers.fr/publications?f[keyword]=12757
[15] http://okina.univ-angers.fr/publications?f[keyword]=13217
[16] http://okina.univ-angers.fr/publications?f[keyword]=1075
[17] http://okina.univ-angers.fr/publications?f[keyword]=991
[18] http://okina.univ-angers.fr/publications?f[keyword]=13292
[19] http://okina.univ-angers.fr/publications?f[keyword]=13293
[20] http://okina.univ-angers.fr/publications?f[keyword]=13294
[21] http://okina.univ-angers.fr/publications?f[keyword]=968
[22] http://okina.univ-angers.fr/publications?f[keyword]=5941
[23] http://okina.univ-angers.fr/publications?f[keyword]=12865
[24] http://okina.univ-angers.fr/publications?f[keyword]=13295
[25] http://okina.univ-angers.fr/publications?f[keyword]=10067
[26] http://okina.univ-angers.fr/publications?f[keyword]=6125
[27] http://okina.univ-angers.fr/publications?f[keyword]=6070
[28] http://okina.univ-angers.fr/publications?f[keyword]=6062
[29] http://okina.univ-angers.fr/publications?f[keyword]=13296
[30] http://okina.univ-angers.fr/publications?f[keyword]=13288
[31] http://okina.univ-angers.fr/publications/ua8256
[32] http://dx.doi.org/10.1016/j.ejvs.2009.10.009