The in situ cephalic vein bypass

- an option for arterial revascularization in critical forearm ischemia

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Objectives
Critical ischemia of the upper limb is a rare condition and may lead to amputation and significant morbidity. Surgical interventions need individualized solutions, particularly if the patient suffers from a chronic shoulder dislocation.

Methods
Case report of a 85-year-old female patient with critical ischemia of the right arm and concomitant omarthritis with antero-caudal dislocation of the shoulder.

Results
The patient presented with progressively cold and numb fingers starting 6 weeks before. Recapillarisation of the finger tips was delayed and peripheral pulses were absent. Duplex sonography and CT-angiography delineated occlusion of the brachial artery and subocclusion of the distal axillary artery. Thrombembolectomy was performed and palpable radial pulse documented thereafter. A cardiac or proximal aortic source for embolization was rouled out and the patient received aspirine.

Three weeks later progressive numbness of the fingers and restpain were noticed. Another 5 weeks later the patient was admitted with critical ischemia of the forearm.
As other sources for embolization had been rouled out after the initial intervention, this time, local damage to the axillary artery caused by chronic dislocation of the shoulder was found guilty as the source of recurrent embolization.

Conclusions
The in situ cephalic vein bypass is an elegant option to treat critical upper limb ischemia, particularly in a patient where an orthotopic bypass would also be exposed to the causative chronic shoulder dislocation.