Reviewer's report

Title: Superficial saphenofemoral arteriovenous fistula as hemodialysis access: clinical experience

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Reviewer: Christopher P Gibbons

Reviewer's report:

This is an interesting paper describing reasonable contemporary results for AV fistulae in the thigh using long saphenous vein in a straight configuration. This is of particular interest since few have used this approach over the last 30-40 years because of poor patencies and needling difficulties and little has been written on it over the last 10-20 years. Unfortunately, whilst I sympathize with the difficulty in writing a paper in a foreign language, the paper suffers from very poor English which makes it very difficult to understand. There are also words that I do not recognise (e.g. "confection", which I take to mean "construction" rather than "chocolate"). It is also rather too long and would benefit from shortening by a third and rewriting by a more proficient English speaker.

The authors coin the term "superficial saphenofemoral AV fistula" which is confusing and would be better simplified to "saphenofemoral AV fistula".

The abstract does not explain what the authors mean by a superficial saphenofemoral AV fistula and should make it clear that it is an AV fistula between the superficialised long saphenous vein and the superficial femoral artery in the adductor canal. The lengthy explanation of the intraoperative failure of one fistula seems unnecessary in an abstract.

The introduction is very difficult to understand. Despite nearly 30 years experience in vascular access I have never heard of a "handle" technique before so if the authors think this is important this requires explanation.

The methods are again difficult to follow and, in particular, the sentence "Fistulas were evaluated according to puncture, HD flow, spontaneous venous pressure absence and dialysis adequacy according to K.T/V [17]. It was defined as puncture facility: catheterization of the fistula at its first attempt; ideal HD flow: values above 250 ml/min; absence of spontaneous venous pressure: pressure lower than 100/mm Hg at the end of devolution with optimal blood flow; urea clearance dialysis adequacy (in vitro) multiplied by the duration of dialysis in minutes divided by the volume of urea distribution (weight x 0.6), considering the ideal week value of 1.2." requires translation into better English. If a problem was found using one of these methods what imaging was used (duplex ultrasonography) and how were the fistulae then treated (i.e. by angioplasty or by surgical revision)? (It seems from the discussion that only fistulography and occasional angioplasty was used but this needs clarification in the methods section). I presume "tremor" should be translated as "thrill" (or should this be "bruit"). The photographs of the technique are reasonably good but it would have
been nice to have had one photograph of the completed AV fistula before the wounds were closed.

Table 1 is unnecessary. Table 3 should be replaced by a survival graph which can be readily produced using commercial statistical packages such as SPSS. On page 7 (last line) this unusual word “confection” comes up again with yet another apparent meaning (? “function”).

The results are expressed as “cumulative patency” and then the authors employ the dubious technique of improving their figures by eliminating early failure, justifying this by the apparent recommendations of KDOQI. Instead, the authors should use the normal way of describing patency in vascular surgery: ie primary and secondary patency. The absence of any steal is a surprising but important finding.

The discussion is long winded and very confusing due to the almost incomprehensible English. The term “magna saphenous vein” would be more recognisable to English speakers as “long saphenous vein” or “greater saphenous vein”. The sentences on page 13 “It showed that the rate increases to 51.04% in 60 months, with standard deviation of 6.36% in 42 fistulas. On the other hand, analysis of results after 12 and 24 months revealed a patency rate of 78.2% and 63.8% respectively, a rate close to researches published by Brescia and Cimino [26, 27], whose primary patency at six months ranged between 65% and 81%.” leaves me baffled as to its meaning.

All of the above are major compulsory revisions.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests: 

I declare that I have no competing interests