Reviewer's report

Title: Saphenofemoral arteriovenous fistula as hemodialysis access

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Reviewer: Christopher P Gibbons

Reviewer's report:

The authors have tried to make substantial improvements to this paper and have apparently had the English language reviewed by an English speaker. However, whilst the data are of sufficient interest to merit publication and the paper is now more understandable, the language still falls short of an acceptable standard for an English language journal. Moreover there are still some numerical errors.

Abstract:
The English is poor and this needs considerable revision to make it readable. There is also a numerical error in the abstract. As a guide, I have rewritten the abstract below. Similar changes to the rest of the paper are necessary for it to become publishable.

Background:
An upper limb arteriovenous (AV) fistula is the access of choice for haemodialysis (HD). There have been few reports of saphenofemoral AV fistulas (SFAVF) over the last 10-20 years because of previous suggestions of poor patencies and needling difficulties. Here, we describe our clinical experience with SFAVF.

Methods: SFAVFs were evaluated using the following variables: immediate results, early and late complications, intraoperative and postoperative complications (up to day 30), efficiency of the fistula after the onset of needling and complications associated to its use. Results: Fifty-six SFAVF fistulas were created in 48 patients. Eight patients had two fistulas. 8 (rather than 6 as the authors say) patent (16%), 10 transplanted (20%), 12 deaths (24%), 1 low flow (2%) and 20 thrombosis (39 %). One patient had severe hypotension during surgery, which caused thrombosis of the fistula, which was successfully thrombectomised, four thrombosed fistulae were successfully thrombectomised and revised on the first postoperative day.

After 59 months of follow-up, patency was 44%.

Conclusion: SFAVF is an adequate alternative for patients without the possibility for other access in the upper limbs, allowing efficient dialysis with good long-term patency with a low complication rate.

Introduction:
There are numerous grammatical errors throughout the introduction needing correction. Eg “cost of patients “ should be “patient costs”.
“The access of choice for HD is primary arteriovenous (AV) fistula in upper limb, which involves radial artery and cephalic vein” should read “The access of choice for HD is a primary arteriovenous (AV) fistula in the upper limb, between the radial artery and the cephalic vein.”

I presume “4 hours after HD” means “after 4 hours of HD”.
The last paragraph of the introduction needs a few appropriate definite and indefinite articles to be inserted.

Methods:
“We included patients who all access possibilities were exhausted in upper limbs and presented impossibility of peritoneal dialysis, while those with internal saphenous vein absence, improper saphenous, sequelae of deep venous thrombosis or arterial occlusion in the femoropopliteal territory were excluded.” This should be corrected to:
“We included patients in whom all access possibilities were exhausted in the upper limbs and could not be treated by peritoneal dialysis, while those with an absent or inadequate long saphenous vein, sequelae of deep venous thrombosis or a femoropopliteal arterial occlusion were excluded.

“All subjects signed a consent term” should be corrected to “All patients gave informed consent”

“From August 1998 to May 2006 it was performed 1183 fistulas for HD access.” Needs correction to “From August 1998 to May 2006 1183 fistulas for HD access were performed.”

“ The 56 SFAVF were performed in 48 patients who underwent HD, in whom all access possibilities were exhausted and whose limbs met the inclusion criteria.

“In eight patients it was performed two SFAVF, six females and two males” should be “In eight patients (6 women and 2 men) two SFAVF were performed” – were these performed at the same time or was the second AVF performed because of failure of the first one?

“The 10 years old patient presented low weight and no vessels with appropriate size.” should be “One 10-year old patient was of small stature and had no vessels of an appropriate size.”

The authors consider 250ml/min as an “ideal” flow. Most units would consider 300ml/min as an absolute minimum for adequate dialysis. I would therefore suggest using the term “minimal acceptable” rather than “ideal”.
..absence of spontaneous venous pressure was considered as pressure lower than 100/mm Hg at the end of devolution with optimal blood flow and urea clearance dialysis adequacy (in vitro) was multiplied by the duration of dialysis in minutes divided by the volume of urea distribution (weight x 0.6). We considered 1.2 as the ideal week value.” This needs rewriting in English. Do the authors mean “dialysis” rather than “devolution”? “pesudo aneurysm” should be “pseudoaneurysm” ie one work or at least hyphenated.

The rest of the methods section is understandable but requires rewriting in proper English grammar.

Results:
This is generally understandable despite the poor English.
On P9 “ pseudo aneurysm puncture” I suspect means “ puncture pseudoaneurysm”

“In cases of patients with thrombosis and low flow (21 fistulas, eight subjects)” – does this mean “ thrombosis or low flow” as a completely thrombosed AV fistula would have no flow.

“By eliminating the primary failure, i.e., fistulas thrombosis in the first two months of preparation, according to the recommendations of the National Kidney Foundation (NKF)-Dialysis Outcomes Quality Initiative (DOQI) Clinical Practice Guidelines for Vascular Access, 1997, it was withdrawn from analysis nine fistulas (seven thromboses and two due to death), we obtained then a permeability of 51.04% in this period.” Apart from the very bad English, the elimination of primary failures to improve the figures is not warranted. Also I suspect they mean patency rather than permeability.

Discussion:
Whilst improved, this also requires some further translation into proper English.

Figures:
The photos are of relatively poor quality
Figure 9: Remove “plottage area”

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