

Neo-valvuloplasty for lymphatic supermicrosurgery



Dear Sir,

Lymphatic supermicrosurgery, lymphaticovenular anastomosis using supermicrosurgical technique, is becoming an useful option for the treatment of lymphoedema.^{1–5} It is important to maintain an anastomosis patent, because congested lymph is drained into venous circulation via the anastomosis. Venous reflux is considered a negative factor associated with anastomosis site thrombosis, and it is important to use a vein with an intact valve as a recipient vein to prevent venous reflux.^{1,2,4} However, we sometimes face a situation where there is no vein with a valve in a surgical field. To address this challenge, we developed a new technique for lymphatic supermicrosurgery.

A venule or small vein branched from a subcutaneous vein is used as a recipient vessel for lymphaticovenular anastomosis. The adventitia of the recipient vein is sutured to make a neo-valve at the branching site. Two vertical mattress sutures are placed at the proximal and distal sites along the subcutaneous vein axis to invert the branched vein into the subcutaneous vein; the inverted vein makes a valve-like structure within the subcutaneous vein (Figure 1). Since the new-valve prevents venous reflux into the lymphatic vessel and is thoroughly surfaced with endothelial cells, thrombosis can be avoided both at the anastomosis site and at the neo-valve.

Neo-valvuloplasty thus prevents venous reflux and subsequent anastomosis site thrombosis even when there is no valve in a recipient vein for lymphaticovenular

anastomosis. Further clinical investigations are required to refine surgical procedures and confirm the efficacy of the methods.

Disclaimers and disclosure of conflicts of interest

None.

Sources of support that require acknowledgement

None.

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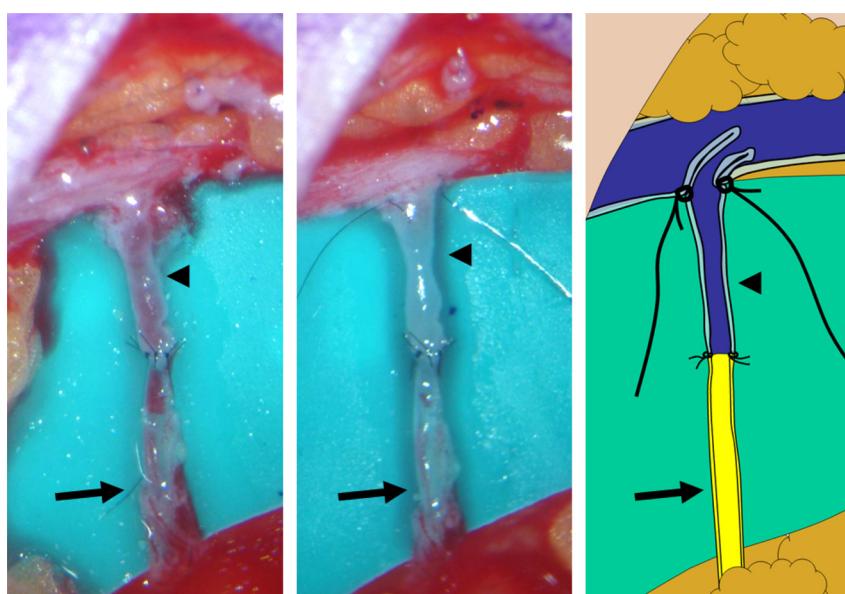


Figure 1 Neo-valvuloplasty for lymphaticovenular anastomosis. Before neo-valvuloplasty, venous reflux is evident (left). After neo-valvuloplasty, venous reflux can be prevented (centre). A schematic drawing of neo-valvuloplasty (right). Arrows indicate a lymphatic vessel, and arrowheads a vein.

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<http://dx.doi.org/10.1016/j.bjps.2013.10.044>

Reference to fruit in medical nomenclature



Dear Sir,

We refer to a previous correspondence published in Plastic and Reconstructive Surgery regarding reference to animals in medical nomenclature.¹ Such reference, it was suggested, risks upsetting patients who may not appreciate being compared to an elephant, a turkey or a spider. Ten years on however, we continue to refer to prominent ears as being bat ears. This led the authors to consider other physical conditions with descriptive nomenclature. While comparison with a fruit does not carry the same negative connotations as comparison with animals, it was interesting to note how frequently such terms are used.

Strawberries are a particular favourite. A 'strawberry haemangioma' for example is commonly diagnosed in infancy. A child presenting with an acute rash, lymphadenopathy and fever may provide a diagnostic challenge unless the presence of a 'strawberry tongue' clinches the diagnosis of Kawasaki disease. Furthermore, the presence of a 'strawberry cervix' (*colpitis macularis*) may facilitate a diagnosis of *Trichomonas vaginalis* infection.

Other berries have also been handpicked into medical nomenclature; congenital syphilis may result in deformity of the permanent first molars known as 'mulberry molars', and rubella infection may result in a 'blueberry muffin' baby. Metabolic conditions are also ripe with such terminology; the 'lemon on stick' appearance of a patient with Cushing's disease for example. Branched-chain ketoaciduria may result in scented urine referred to as 'maple syrup urine disease', which if left untreated may lead to permanent brain damage.

The use of fruits in medical nomenclature has been adopted across most sub-specialities; an 'apple core lesion' is consistent with a radiological diagnosis of bowel cancer and a hypertrophic left ventricle may resemble a 'banana' on an echocardiogram. Gynaecologists describe hydatidiform moles as being akin to a 'bunch of grapes', Plastic surgeons smell the 'grape-like odour' of *pseudomonas* infection, Paediatricians describe the 'red-currant jelly stool' associated with intussusception and Gastroenterologists recognise the 'watermelon stomach' appearance in gastric antral vascular ectasia. Cherries have also traversed specialities; Ophthalmologists describe the 'cherry red hue' associated with retinal artery occlusion, Burns Surgeons describe the 'cherry-red' skin appearance seen with carbon monoxide poisoning and Dermatologists refer to Campbell-de-Morgan spots as 'cherry angiomas'.

While mildly droll and quaint comparisons such as the above may be acceptable in some circumstances, perhaps one should tread carefully within the context of cancer diagnosis. The 'peau d'orange' or orange skin appearance of breast cancer, serves as an example.

Yours sincerely.

Conflict of interest

None.

Funding

None.

Reference

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<http://dx.doi.org/10.1016/j.bjps.2013.12.008>