SAMJ
ARTICLES

Die belangrikheid van sagteweefsel pedikels in beserings van die gesig

Verslag van 2 gevalle

C. S. F. Smit

Twee gevalle wat demonstreer dat die sagteweefsel pedikel van gedeeltelik geamputeerde weefsel in gesigbeserings behou moet word, word beskryf. Eenvoudige, praktiese maatreëls om optimale bloedvloei deur die pedikel te verseker, word genoem: torsie van bloedvate en uitdroging van weefsel moet voorkom word, vasokonstriksie beperk word, weefsel versigtig hanteer word en drukking vermy word.

S Afr Med J 1995; **85:** 1299-1300.

Pasiënte met beserings van die gesig presenteer soms met 'n feitlik totale amputasie van weefsel wat slegs met 'n baie dun pedikel aan die gesig verbind word. Dikwels word so 'n pedikel as onbelangrik beskou en deur die behandelende persoon deurgesny. Die besondere vaskulariteit van die gesig verseker die lewensvatbaarheid van weefsel wat elders op die ligaam nie sou oorleef het nie. Dit is daarom uiters noodsaaklik dat hierdie sagteweefsel verbinding van die gedeeltelik geamputeerde deel nie verwyder word nie. Twee gevalle word ter illustrasie beskryf.

Gevalbesprekings

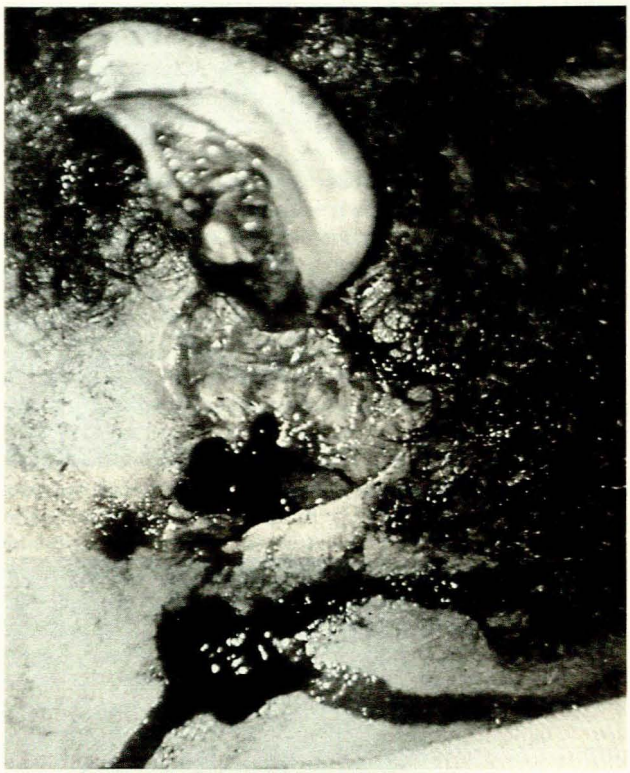
Geval 1

'n Vier-en-twintigjarige vrou se linkeroor was byna totaal in 'n motorongeluk geamputeer. Daar was slegs 'n velverbinding van 4 x 2 mm superior (Afb. 1). Met ondersoek was die oor edemateus met 'n blou verkleuring en sonder enige bloeding vanaf die vry rand. Drie uur na die voorval is die oor onder lokale verdowing (lignokaïen sonder adrenalien) met 4/0 vicryl en 6/0 nylon geheg. 'n Enkellaag Jelonet is as die enigste verband gebruik.

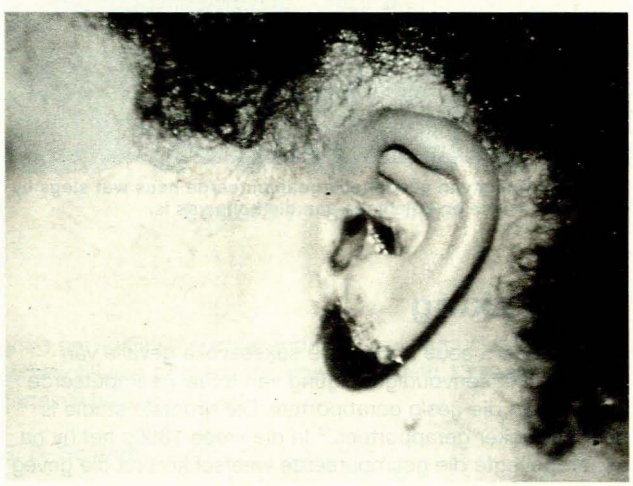
Kort na die hegting het die kleur van die oor verbeter, maar dit was nog steeds baie edemateus. Die edeem het oor 'n tydperk van omtrent 3 weke verdwyn. Na 1 week was dit duidelik dat die distale deel van die lobule besig was om nekrose te ondergaan (Afb. 2). Dit is na 3 weke verwyder en die wond het sekondêr sonder enige verdere behandeling genees. Die ourikel het volledig herstel en het 'n normale voorkoms behalwe vir die kleiner lobule (Afb. 3).

Departement Plastiese en Rekonstruktiewe Chirurgie, Universiteit van Stellenbosch en Tygerberg-hospitaal, Tygerberg, Wes-Kaap

C. S. F. Smit, M.MED.



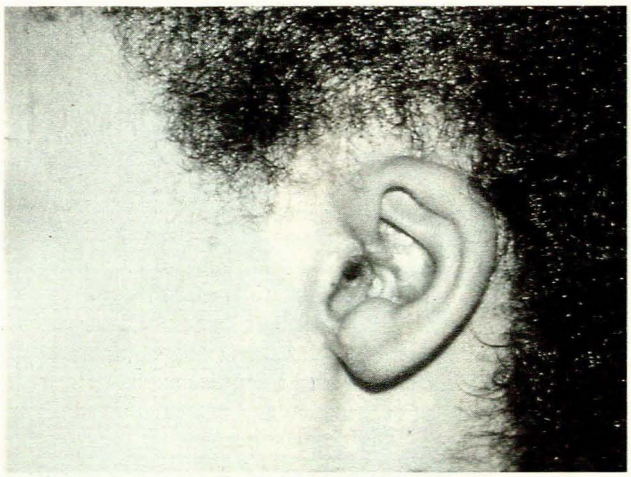
Afb. 1. Gedeeltelike amputasie van die oor met slegs superior sagteweefsel verbinding.



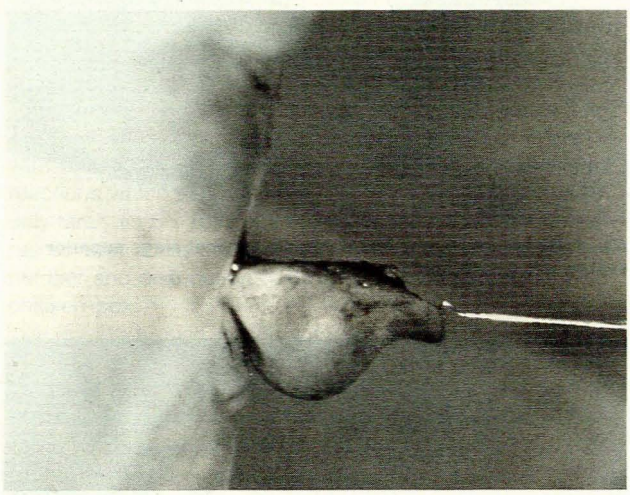
Afb. 2. Die oor is nog steeds edemateus en nekrose van die lobule duidelik sigbaar na 2 weke.

Geval 2

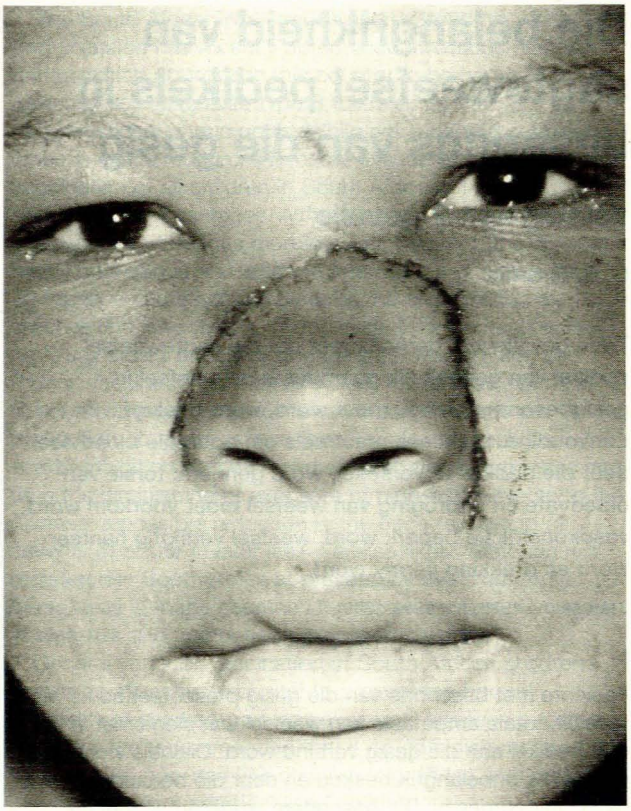
'n Agtienjarige meisie se neus is byna totaal in 'n aanranding met 'n bottelkop afgesny. Die neus was slegs met klein velpedikels by die alare basis en kolumella aan die bolip verbind (Afb. 4). Die pasiënt was vanaf die platteland verwys en kon eers 36 uur na die voorval teater toe geneem word. Ten spyte van die lang tydsverloop was die kleur van die neus normaal en duidelik lewensvatbaar. Dit is onder algemene narkose met 4/0 vicryl en 6/0 nylon geheg. Die neus het volledig herstel (Afb. 5).



Afb. 3. Voorkoms van die oor na 3 maande.



Afb. 4. Syaansig van gedeeltelik geamputeerde neus wat slegs by die alare basisse en kolumella aan die bolip vas is.



Afb. 5. Voorkoms van die neus na 5 dae.

Bespreking

Die afgelope 5 eeue is slegs 19 suksesvolle gevalle van oorlewing na eenvoudige hegting van totaal geamputeerde weefsel van die gesig gerapporteer. Die grootste studie is deur Hoffacker gerapporteer.[1,2] In die vroeë 1800s het hy na swaardgevegte die geamputeerde weefsel kort na die geveg geheg en merkwaardige sukses behaal.

Vandag kan mikrochirurgiese tegnieke gebruik word om totaal geamputeerde weefsel van die gesig terug te werk. Ten spyte van die sukses met die tegniek elders in die liggaam, is die suksessyfer in die geval van 'n geamputeerde oor of neus nog steeds baie laag. Dit is hoofsaaklik as gevolg van probleme om bloedvate met geskikte deursnee vir hegting in die oor of neus te vind.[3]

Histories en hedendaags is die oorlewingsyfer na hegting van totaal geamputeerde weefsel van die gesig laag. In teenstelling daarmee, is die prentjie meer rooskleurig in die geval van onvolledige amputasie. 'n Totale oorlewing van ongeveer 70% kan verwag word.[4] Die belangrikste rede hiervoor is die uitstekende vaskulariteit van die gesig, wat verseker dat daar voldoende bloedvloei is deur selfs baie dun sagteweefsel pedikels om die gedeeltelik geamputeerde weefsel te laat oorleef.

'n Paar eenvoudige maatreëls wat daarop ingestel is om optimale bloedvloei deur die sagteweefsel pedikel te verseker, dra by tot oorlewing van die weefsel. Eerstens moet die gedeeltelik geamputeerde weefsel in die normale anatomiese posisie geplaas word. Dit skakel torsie en verwringing van die bloedvate uit. Tweedens moet uitdroging van die weefsel voorkom word deur dit klam te hou. Bedekking van die weefsel met 'n gaasdepper wat gereeld met normale soutoplossing natgemaak word, is ideaal vir dié doel. Derdens moet vasokonstriksie beperk word en om dié rede moet geen adrenalien gebruik word indien die hegting onder lokale verdowing gedoen word nie. Vierdens moet die weefsel versigtig met fyn instrumente hanteer word om verdere weefselskade te voorkom. Laastens is dit noodsaaklik dat geen drukverbande aangewend word nie, aangesien dit die vaskulêre vloei kan beperk.

Die twee gevalle demonstreer dat selfs die nietigste verbinding tussen geamputeerde weefsel en die gesig behou en korrek hanteer moet word. Dit is dikwels die enigste verskil tussen oorlewing en nekrose.

VERWYSINGS

1. Hoffacker W. Beobachtungen uber die Anheilung abgehauener der Nase und Lippen. *Heidelb Chir Ann* 1828; **4:** 232.
2. Hoffacker W. Case history of a severed portion of the nose which was completely detached from the body for twenty-five minutes. *Med Ann* 1836; **2:** 149.
3. Tanaka Y, Tajima S. Completely successful replantation of an amputated ear by microvascular anastomoses. *Plast Reconstr Surg* 1989; **84:** 665.
4. Grabb WC, Dingman RO. The fate of amputated tissues of the head and neck following replacement. *Plast Recontr Surg* 1972; **49:** 28.

SAMJ

Briewe

Letters to the Editor

Handbook of Paediatrics, *4th edition — error*

To the Editor: It has been brought to our attention that in the 4th edition of the *Handbook of Paediatrics*, edited by H. de V. Heese and published by Oxford University Press (1995), there is a mistake in the Paediatric Resuscitation Chart (Fig. 1.1, on inside covers of the book and also on p. 9). We would like to bring this to the attention of any present and potential users of this chart.

The dose of diazepam and glucose should read as follows:

DIAZEPAM (ml of 5 mg/ml emulsion) Intravenous or rectal	0.4	0.8	1.6	2	2	2	Convulsions
Glucose (ml of 50%) Intravenous or intra-osseous (dilute to 25% in infants)	5	10	20	30	40	50	Hypoglycaemia

Correction slips will be added to unsold books. We apologise for this error.

Andrew Argent
H. de V. Heese

Department of Paediatrics and Child Health
University of Cape Town

Hepatitis B immunisation in schools

To the Editor: A recent campaign to immunise schoolchildren against hepatitis B using teams from the private sector has caused some confusion and consternation among medical practitioners, parents and teachers. In April 1995, the Department of Health introduced universal hepatitis B immunisation by adding hepatitis B vaccine to the routine EPI schedule and administering the vaccine simultaneously with DPT at 6, 10 and 14 weeks.

As part of the EPI immunisation schedule, hepatitis B vaccine is free to all infants; however, no provision for free immunisation has been made for children born before 1995. The major age groups at risk for hepatitis B virus infection are infants and children up to the age of 5 years (where the infant is infected by its mother or by close and intimate contact with exchange of body fluids with siblings or playmates) and adolescents and adults in the sexually active age group (where the virus is mainly transmitted sexually and via contaminated needles).

The cost of hepatitis B vaccination is unfortunately still high, and in many families it does impose an onerous additional financial burden. However, for this financial outlay parents need to be assured that their child would be receiving one of the safest and most effective of human vaccines, which will protect against a potentially serious and occasionally lethal disease. While the lifetime risk to the average schoolchild of being infected with hepatitis B virus is relatively small, it is still significant, since infection may be acquired in a number of ways: (*i*) sexually — the alarming incidence of other sexually transmitted diseases in teenagers and young adults reflects the danger of being infected with hepatitis B virus by the sexual route; (*ii*) sharing of contaminated needles — although intravenous drug abuse is still relatively uncommon in South Africa, this problem is certainly on the increase; (*iii*) other contaminated needles — tattooists' needles, beauticians' needles, needles used by acupuncturists, all pose a significant risk; (*iv*) occupational risk — individuals entering into the health care professions, security personnel, personnel working in institutions for the mentally handicapped, are all at significant risk of hepatitis B virus infection; and (*v*) cryptic infection — in up to 20% of cases the route of hepatitis B transmission is difficult to establish — presumably unrecognised exposure through cuts or abrasions is the route of transmission of the virus.

Because of these risks, several countries in Europe have successfully introduced universal immunisation programmes for schoolchildren in addition to routine infant immunisation,[1,2] and in Italy both infant and school immunisation is compulsory.[3] In the USA routine adolescent hepatitis B immunisation has been recommended by the Advisory Committee of Immunization Practices and the American Academy of Paediatrics.[4] A school immunisation programme has also been advocated for South Africa.[5]

With regard to choice of vaccine, it is important to emphasise that no differences have been convincingly demonstrated for efficacy or for safety.

In principle, school-based hepatitis B immunisation is good preventive medicine and universal immunisation of schoolchildren between the ages of 10 and 13 years should certainly be encouraged.

B. D. Schoub

National Institute for Virology
Sandringham, Gauteng

M. C. Kew

Department of Medicine
University of the Witwatersrand
Johannesburg

1. Goudeau A, Dubois F. Incidence and prevalence of hepatitis B in France. *Vaccine* 1995; **13:** suppl 1, S22-S25.
2. De la Torre J, Esteban R. Implementing universal vaccination programmes: Spain. *Vaccine* 1995; **13:** suppl 1, S72-S74.
3. Serafi G, Caramello S, Vaudetto S. Compliance to compulsory vaccination: strategies and results. *Eur J Epidemiol* 1995; **11:** 349-350.
4. Centers for Disease Control. Recommended Childhood Immunisation Schedule — United States, 1995. *MMWR* 1995; **44:** 1-8.
5. Voigt M, Kirsch R. Universal infant immunisation for hepatitis B — from dream to reality. *S Afr Med J* 1995; **85:** 339.