

by duplication of articles in different journals, this may be one of the occasions when it would be useful if it were reprinted in an orthopaedic journal.

The young age of the patients (average 24 years) highlights the importance of correct management of these injuries from the outset. Is it therefore adequate that only 24 out of 46 patients were referred to the plastic surgery unit from orthopaedic surgeons within 72 hours? It would seem to us that the most appropriate time for plastic surgery input is at the onset of management and not after several days. The arrangement of having a plastic surgeon associated to a trauma team is surely one step that may help to avoid the tragic scenario of non-union or osteomyelitis occurring as a complication of these injuries. The potential benefits from simultaneous orthopaedic and plastic surgical input at the time of presentation, makes the recent decision by Riverside Health Authority to separate the two specialities onto different hospital sites a disappointing one. We feel that this is a retrograde step that can only hinder the potential for achieving early and suitable soft tissue cover.

Yours faithfully,

D. G. Hargreaves, FRCS,
SHO in Plastic Surgery (trainee in Orthopaedics),
St George's Hospital,
London

M. S. Davies, FRCS,
Registrar in Orthopaedics,
Charing Cross Hospital,
London

The vestibular fold

Sir,

The vestibular fold is one of the characteristic features in patients with cleft lip nose deformity, but its anatomy is poorly understood. We have investigated the relationship between the vestibular fold and the lower lateral cartilage by insertion of a hypodermic needle under direct vision during secondary repair of cleft lip noses in 38 patients. As a result, it was learned that the vestibular fold is formed by the lower border of the lower lateral cartilage in every case (Figure).

Huffman and Lierle¹ must be credited with the in-depth description of the anatomy of the cleft lip nasal deformity. Berkeley² discussed the vestibular fold and stated that it runs



Figure

Figure—A 5-year-old female at operation. When needles are inserted along the line of the lower border of the lower lateral cartilage, they are seen to conform to the vestibular fold.

from the apex of the nostril along the upper border of the lower lateral cartilage to the margin of the piriform sinus. The erroneous passage by Berkeley above has been quoted in 'Cleft Craft' by Millard³. Moreover, even in the textbook of Plastic Surgery by Tord Skoog⁴, the vestibular fold is illustrated as though formed by the upper border of the lower lateral cartilage. In contrast, Uchida⁵ referred to the vestibular fold as the plica vestibularis and stated that the lower border of the lower lateral cartilage curves toward the vestibule and forms the plica vestibularis. Consequently, the results of our own investigation and Uchida's paper provide convincing evidence that the statements in Berkeley's paper and the Millard and Skoog textbooks concerning the vestibular fold are erroneous. Knowing what gives shape to the vestibular fold is an extremely important point from the standpoint of performing corrective surgery.

Yours faithfully,

Yuiro Hata, MD,
Associated Professor,
Department of Plastic Surgery,
Kagawa Medical School,
1750-1, Ikenobe, Mikicho, Kitagun.
Kagawaken, Japan, 761-07.

References

- Huffman WC, Lierle DM. Studies on the pathologic anatomy of the unilateral hare-lip nose. *Plastic and Reconstructive Surgery* 1949; 4: 225.
- Berkeley WT. Correction of the unilateral cleft lip nasal deformity. In: Grobb WC, Rossenstein SW, Bzoch KR, eds. 1st ed. Boston: Little, Brown and Company, 1971: 229.
- Millard DR. *Cleft Craft*. 1st ed. Vol 1. Boston: Little, Brown and Company, 1976: 632.
- Skoog T. *Plastic Surgery*. 1st ed. Stockholm: Almqvist & Wiksell International, 1974: 59.
- Uchida J. A new approach to the correction of cleft lip nasal deformities. *Plastic and Reconstructive Surgery*. 1971; 47: 454.

Necrotising fasciitis

Sir,

I would like to comment on the recently published paper "Necrotising fasciitis in the head and neck region" by Maqbool *et al.* (*British Journal of Plastic Surgery*, 45, 481).

In their review of the literature, Maqbool *et al.* did not find any case of necrotising fasciitis affecting the head and neck region. Nevertheless, this rare disease has been previously reported in several papers. Bahna and Canalis¹ reviewed the literature and found seven cases of this infection involving head and neck structures. Ezquerro *et al.*² described a clostridial gangrene of head and neck, affecting the subcutaneous fat, superficial and deep fascia, frontal muscle and cranial periosteum. Yamaoka *et al.*³ reported a case in which the infection was secondary to self-inflicted bite wound, and extended to the infratemporal fossa, lateral pharyngeal space and carotid sheath.

Immunocompromised patients with acquired immunodeficiency syndrome can also develop necrotising infections. Leiva and Escudero⁴ reported the clinical course of a woman with a history of prostitution, heroin addiction and AIDS, who sustained a progressive and extensive necrotising fasciitis of the head and neck. It was secondary to a small wound on the left parietal region of the scalp, and extended to several areas of the scalp, forehead, both left eyelids, left preauricular and retroauricular regions, and neck (Figure).



Figure

Figure—Necrotising fasciitis involving the head and neck.

The patient had systemic signs of sepsis and other complications. She died despite a radical debridement of all affected tissues. This case illustrated the aggressiveness of these infections, especially in AIDS patients.

Yours faithfully,

F. J. Escudero Nafs, MD,
Service of Plastic Surgery,
"Virgen del Camino" Hospital,
Pamplona, Navarra,
Spain.

References

1. Bahna M, Canalis RF. Necrotizing fasciitis (Streptococcal gangrene) of the face. Report of a case and review of the literature. *Arch Otolaryngol* 1980; 106: 648-51.
2. Ezquerro F, Solano I, Berrazueta MJ, Sáinz J, Soto J. Celulitis gangrenosa fronto-facial por clostridium: análisis de un caso. *Rev Esp Cir Oral y Maxilofacial* 1989; 11: 88-91.
3. Yamaoka M, Furusawa K, Kiga M, Iguchi K, Hirose I. Necrotizing buccal and cervical fasciitis. *J Cranio-Max-Fac Surg* 1990; 18: 223-4.
4. Leiva Oliva RM, Escudero Nafs FJ. Gangrena progresiva de cabeza y cuello, como complicación del síndrome de inmunodeficiencia adquirida. *Cir Plast Ibero-Latinoamer* 1990; 16: 303-6.

Darrier's disease

Sir,

We have recently been faced with a dilemma in the management of a patient with Darrier's disease, a rare severe nodulo-cystic skin condition, affecting predominantly the face and midline of the body. Our patient had received various courses of Isotretinoin (Roaccutane) under the care of the dermatologists with only limited success. It had, therefore, been suggested that facial dermabrasion might be of cosmetic benefit in amelioration of the disfiguring facial scarring.

This case has highlighted an important point for surgeons.

Review of the dermatological literature underlines the danger of these two forms of treatment when combined together.

The use of the Retinoids, in particular Isotretinoin (Roaccutane), in the management of severe recalcitrant acne and other seborrhoeic skin conditions has to some extent revolutionised their management, producing rapid clearing and prolonged periods of remission.¹ One course is often enough to achieve a satisfactory disease free state. Residual facial scarring, however, can be a problem and for this reason, patients may present to the plastic surgery department for facial dermabrasion. It should be remembered that a significant number of these patients may be on concurrent Isotretinoin therapy, or may have recently finished a course of treatment.

Various reporters have encountered undesirable complications following dermabrasion of patients either on, or having recently finished, a course of treatment.^{2,3} The main problems identified with dermabrading such patients are those of delayed wound healing and, more importantly, atypical keloid scarring appearing two to four months after the initial dermabrasion. Interestingly, the keloid scars occur in unusual sites, for example the cheeks and forehead.

Isotretinoin and its derivatives have been shown to have diverse effects on the metabolic activity of the skin and, in particular, on fibroblast activity. Its potency as a drug against acne lies in its ability to depress the activity of the pilo-sebaceous unit dramatically. It has been postulated that this may be an important factor in delayed wound healing – the pilo-sebaceous unit being important in the re-epithelialisation process. Isotretinoin has also been shown to suppress collagenase activity in keloid fibroblast cultures,⁴ a fact which has led to the speculation that this may be a mechanism by which keloid formation is promoted, or, at least, not inhibited.²

It is difficult to explain the abnormal scar sites, however, it is possible that in altering the biochemical and physiological nature of the skin, its mechanical properties are also affected and this interaction may contribute to abnormal scar formation.

Different authors advocate varying time intervals between stopping Isotretinoin treatment and commencing dermabrasion. Some have advocated a wait of as long as one to two years before undertaking such treatment.⁵ Though this may appear to be a long time, it should be remembered that the effects of Isotretinoin are longlasting and it would seem prudent to wait for a period of at least three to six months before undertaking dermabrasion in a patient who has been on Isotretinoin.

Yours faithfully,

Patrick L. Mallucci,
Brian D. Morgan,
University College Hospital,
London

References

1. Roenigk HH Jr, Pinski JB, Robinson, JK, Hanke, CW. Acne, retinoids and dermabrasion. *J Dermatol Surg Oncol* 1985; 11: 4.
2. Zachariae H. Delayed wound healing and keloid formation following argon laser treatment or dermabrasion during Isotretinoin treatment. *Br J Dermatol* 1988; 118: 703-6.
3. Rubinstein R, Roenigk HH Jr, Stegman SJ, Hanke CW. Atypical keloids after dermabrasion of patients taking Isotretinoin. *J Am Acad Dermatol* 1986; 15: 280-5.
4. Abergel RP, Meeker CA, Oikarinen H et al. Retinoid modulation of connective tissue metabolism in keloid fibroblast cultures. *Arch Dermatol* 1985; 121: 632-5.
5. Coleman WP. Dermabrasion and hypertrophic scars. *Int J Dermatol* 1991; 30: 9.