focal areas of morphologically typical SFT are present, and can aid in diagnosis.[4,5] These tumours are typically positive for CD34, CD99 and bcl-2, and negative for cytokeratin, S-100 and SMA, similar to conventional SFTs.[3,6] In our case, the results of immunohistochemical staining were consistent with previous reports of myxoid fibrous tumours, and we therefore made a diagnosis of myxoid SFT.

The broad spectrum of histological features of myxoid SFT means there is a large number of conditions to consider in the differential diagnosis.[7] The histological differential diagnosis of myxoid SFT includes dermatofibrosarcoma protuberans (DFSP), benign peripheral nerve-sheath tumours, spindle-cell lipoma, haemangiopericytoma and SFT. DFSP shows infiltrative growth, and involves the dermis and subcutaneous tissue in a layering pattern. Neural tumours may be excluded by histological and immunohistochemical investigations. CD34-reactive cells are also present in spindle-cell lipoma, a tumour that is considered closely related to SFT. Myxoid SFT, similar to SFT, may display a prominent haemangiopericytoma-like vascular pattern, which is usually more diffuse and prominent in haemangiopericytoma. CD34 positivity has also been seen in haemangiopericytoma, but is characteristically weak and patchy. SFT has similar histological features to those of myxoid SFT, but the latter has abundant pale myxoid matrix, which is not seen in SFT.

With the exception of three tumours larger than 100 mm in size,[3] the previously described cases of myxoid SFT did not show any features of biological aggressiveness.[8] There was no evidence of distant metastasis or tumour-related deaths in previously reported cases, except for a single case of tumour relapse.[4] Therefore, simple surgical excision with long-term follow-up is the treatment of choice.

In conclusion, we report a case of cutaneous myxoid SFT located in the scapular area. Although this type of tumour seems to carry a favourable prognosis with low rates of recurrence, complete excision and long-term follow-up are required to validate the biological behaviour of myxoid variants of SFTs, because of their extremely rare occurrence.

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References

1 Suster S, Nascimento AG, Miettinen M *et al.* Solitary fibrous tumors of soft tissue. A clinicopathologic and immunohistochemical study of 12 cases. *Am J Surg Pathol* 1995; **19**: 1257–66.
2 Chang SE, Bae GY, Choi JH *et al.* Cutaneous solitary fibrous tumour with myxoid stroma. *Br J Dermatol* 2002; **147**: 1267–9.
3 de Saint Aubain Somerhausen N, Rubin BP, Fletcher CD. Myxoid solitary fibrous tumor: a study of seven cases with emphasis on differential diagnosis. *Mod Pathol* 1999; **12**: 463–71.
4 Lau SK, Weiss LM, Chu PG. Myxoid solitary fibrous tumor. a clinicopathologic study of three cases. *Virchows Arch* 2009; **454**: 189–94.
5 Wei YC, Li CF, Sung MT *et al.* Primary myxoid solitary fibrous tumor involving the seminal vesicle. *Pathol Int* 2006; **56**: 642–4.
6 Morimitsu Y, Nakajima M, Hisaoka M, Hashimoto H. Extrapleural solitary fibrous tumor. clinicopathologic study of 17 cases and molecular analysis of the p53 pathway. *APMIS* 2000; **108**: 617–25.
7 Hardisson D, Cuevas-Santos J, Contreras F. Solitary fibrous tumor of the skin. *J Am Acad Dermatol* 2002; **46**: S37–40.
8 Shin SS, Jeong YY, Kang HK. Myxoid solitary fibrous tumor of the retroperitoneum: MRI findings with the pathologic correlation. *Korean J Radiol* 2008; **9**: 279–82.

Modifying the S-plasty to optimize a curvilinear scar

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The elliptical or 'fusiform' excision is a standard surgical technique routinely performed by dermatologists and reconstructive surgeons. A variation of this type of excision, the S-plasty or 'lazy S', is often used to repair defects on convex surfaces, with the aim of creating a scar that runs parallel to relaxed skin tension lines (RSTL), resulting in a finer and more cosmetically acceptable scar.[1]

However, on areas of the face such as the zygomatic cheek and lower cutaneous eyelid, closing a defect parallel to relaxed skin tension lines may create tension vectors predisposing to ectropion. Consequently, in such a location (or where any free margin is involved), the design of the closure should be such that tension vectors are directed perpendicular to the free margin. However, linear scars on the central face are undesirable, and thus the reconstructive surgeon must consider the functional and aesthetic consequences of the chosen closure method. It is in such a location that a well designed S-plasty may be successfully used.

The conventional S-plasty design depicted in standard surgical texts[2] may create a scar that in practice is far less curved than originally desired (Fig. 1a). A simple modification in its design and execution (Fig. 1b) can improve the functional and aesthetic outcomes, in particular for defects of the upper zygomatic cheek or lower cutaneous eyelid (Fig. 1c,d).

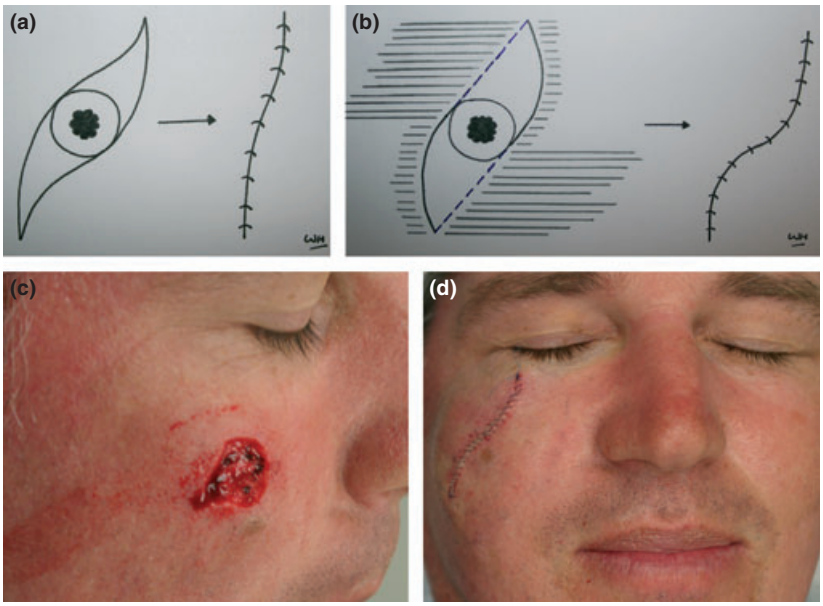

Figure 1 (a) The conventional S-plasty design is based upon the principle of having wounds of unequal length, and closing the defect by the 'rule of halves' to minimize the standing cutaneous deformities that would inevitably result. In practice, however, as both sides of the design are curved throughout their length, unless tissue undermining occurs differentially (Fig. 1b), the curves in essence 'cancel each other out', resulting in a much more linear scar than desired. (b) The modified S-plasty design, rather than being curved throughout its length, has a straight component of each incision line (–) compared with the conventional S-plasty. Such a modification maintains a difference in length between the incision lines above and below the defect, thereby helping to accentuate the desired curve. After the lesion is excised, differential undermining is performed (greater on the straighter limbs of each curve) at the subdermal or superficial subcutaneous level, to preserve the natural convexity of the cheek. Consequently, the straighter limbs of the S-plasty are 'pulled in' towards the curved incision lines, creating a desirable enhanced curvilinear closure. (c) Defect on the right zygomatic cheek after Mohs tumour extirpation; (d) immediate results at closure after modified S-plasty technique, showing a favourable curvilinear closure.

Various modifications of the S-plasty in order to achieve a satisfactory S-curvature have been described, including the use of curved scissors rather than a blade to remove the standing cutaneous deformities.[3] We feel that our simple modification in the design and execution of this established surgical technique is another method of achieving the ideal curvilinear closure, thereby optimizing the aesthetic result of S-plasty repairs.

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References

1 Manstein CH, Manstein ME, Manstein G. Creating a curvilinear scar. *Plast Reconstr Surg* 1989; **83**: 914–15.
2 Robinson JK, Hanke CW, Sengelmann RD *et al.* Ellipse, ellipse variations, and dog-ear repairs, Chapter 18. In: *Surgery of the Skin* (Robinson JK, Hanke CW, Sengelmann RD, Siegel DM, eds). London: Elsevier Mosby, 2005; 259–72.
3 Sebastian S, Bang RH, Padilla S. A simple approach to the S-plasty in cutaneous surgery. *Dermatol Surg* 2009; **35**: 1277–9.