University Hospitals Coventry and Warwickshire NHS Trust

# Spindle Cell Carcinoma: Can it involute?

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## CASE SUMMARY

77-year-old Caucasian male presented with a 3 month history of a tender, rapidly growing nodule over his right lower lid. A 8mm dome shaped nodule, with central crusting and rolled edges, was noted 3.5mm below the eyelash line (figure 1). There was no associated telangiectasia, loss of lashes, lymphadenopathy or reduction in visual acuity. No past medical or ocular history of note.

A 4mm diagnostic punch biopsy revealed a histopathological diagnosis of moderate cellular spindle cell proliferation (figure 2). IHC showed positive pan-keratin cocktail and cell proliferation Ki67 (30%) markers. Tumour suppressor p63, usually positive in spindle cell carcinoma, was negative (figure 3).

Treatment included a right lower lid full thickness excision of the tumour with a 3mm clearance margin, followed by reconstruction. Definitive histology from full thickness excision biopsy initially reported possible involution of the spindle cell carcinoma with further IHC showing paucicellular desmoplastic areas, easily misinterpreted for scarring. Furthermore, the rather sclerotic storiform pattern is not typical of the more cellular pattern typical of scar tissue with prominent myofibroblasts (figure 4).

## FIGURES

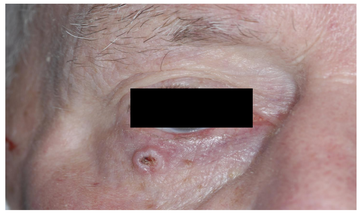


**Figure 1:** Clinical photography of skin lesion

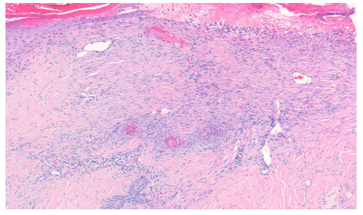


**Figure 2:** Moderately cellular spindle cell proliferation

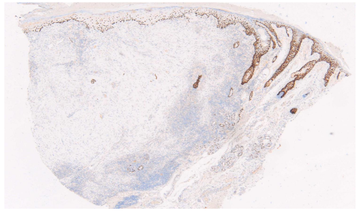


**Figure 3:** p63, usually positive in spindle cell carcinoma, negative in this case

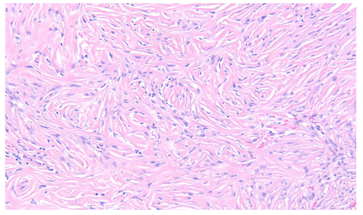


**Figure 4:** Moderately cellular area with storiform pattern, not typical of scarring

## DISCUSSION

Spindle cell carcinomas are a rare variant of squamous cell carcinoma, comprising spindle shaped cells.[1] Clinical appearance of a spindle cell carcinoma is similar to a fibrosarcoma but can also be easily mistaken for a benign lesion. Diagnosis typically involves histological evidence of squamous and spindled cells.[2] Transcription factor p63 has been shown to be particularly useful in diagnosing poorly differentiated spindle cell tumours although unusually our case was negative despite widespread expression for pankeratins.[2]

This case on the excision biopsy was variably cellular and scar-like, making the final histological diagnosis difficult and misinterpretation of the tumour a possibility. It must be differentiated from a number of possible benign and malignant causes mainly atypical fibroxanthoma and melanoma on sun-damaged skin of the head and neck.

This is a highly unusual presentation and highlights the difficulties in diagnosis of this particular type of tumour due to its variable cellularity and ability to mimic benign conditions.

## REFERENCES

1.Völker H, Scheich M, Höller S, Ströbel P, Hagen R, Müller-Hermelink H et al. Differential diagnosis of laryngeal spindle cell carcinoma and inflammatory myofibroblastic tumor—report of two cases with similar morphology. Diagnostic Pathology. 2007;2(1):1.

2.Katase N, Tamamura R, Gunduz M, Murakami J, Asaumi J, Tsukamoto G et al. A spindle cell carcinoma presenting with osseous metaplasia in the gingiva: a case report with immunohistochemical analysis. Head & Face Medicine. 2008;4(1).