

ACID AND BASIC FIBROBLAST GROWTH FACTORS AND THEIR RELATIONSHIP TO VASCULAR DENSITY.

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Both acid and basic fibroblast growth factors have been shown to play an important role in normal wound healing and angiogenesis. Furthermore basic FGF has been shown to be structurally similar to tumour angiogenic growth factors. We have investigated both these factors in patients with breast cancer to assess their relationship to vascular density. Frozen specimens from 55 patients with breast cancer were used to determine levels of mRNA expression to basic and acidic FGF using Northern blotting. Corresponding histological sections were used to determine vascular density by image analysis after staining with the CD34 antibody.

Significantly lower levels of both forms of FGF were seen in malignant compared with benign lesions ( $p = 0.001$ ). There did not appear to be any relationship with vascular density in the levels of expression of either factor.

The results suggest that if FGF is important in tumour angiogenesis, it is not related to a simple quantitative relationship. Further studies are continuing using immunocytochemistry for both forms of FGF.