

## **METASTASIS AND EMBOLISM**

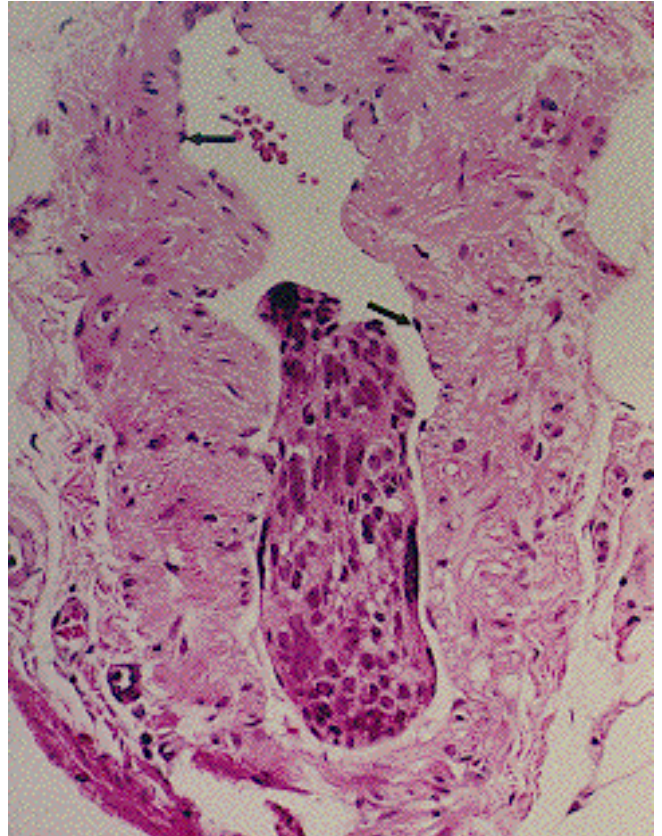
Metastasis occurs when tumor cells which have invaded vessels detach and by embolism migrate to another site and then grow again. No benign tumor does this. Carcinomas ordinarily metastasize through lymphatics, most commonly to regional lymph nodes, where the tumor gradually replaces the node and eventually invades the capsule. Metastasis to ipsilateral lymph nodes is the rule but crossover metastases are common.

Sarcomas tend to spread via blood vessels but so do many carcinomas. Veins, being thinner, and presumably easier to penetrate, account for more metastatic routes than do arteries.

Occult metastatic disease in the neck for which no primary can be found is not uncommon. The primary may first be found years later. Also, embolic cells that lodge in distant tissues frequently must fail to grow since there is good evidence that many embolic cells do not produce metastases. Skeletal muscle, e.g., must receive many tumor emboli but it is seldom the site of a metastatic growth while the liver behaves just the opposite.

All malignant tumors may metastasize but some, notably basal cell carcinoma, rarely do. Metastasis stands as best proof of malignancy.

Nest of embolic squamous cell carcinoma cells probably in a vein. Endothelial cells lining the vessel are visible (arrows) and a few erythrocytes are present. Venous invasion is better verified if a part of the tumor is seen still attached to the wall of the vessel rather than floating free which could represent artifact.



Squamous carcinoma within lymphatics (arrows) of tongue. The lymphatic vessels seen here are small and have very thin walls but do show endothelial lining.

