

Paraganglia

Clusters of chromaffin cells enclosed in thick capsules of dense irregular connective tissue normally occur outside the adrenal medulla associated with the sympathetic nervous system. These form the paraganglia, which are highly vascularized structures that contain two types of cells: chief and supporting cells. Chief cells contain numerous membrane-bound, electron-dense granules that are similar to those of chromaffin cells of the adrenal medulla. They are believed to secrete norepinephrine. Elongated supporting cells that lack secretory granules surround the chief cells, in part or completely. Some paraganglia, such as aortic chromaffin bodies, are paired and quite large. Paraganglia can be important clinically if they secrete abnormally high amounts of catecholamine.

©William J. Krause