

Nervous system of the snail *Helix aspersa*. I. Structure and histochemistry of ganglionic sheath and neuroglia

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The ganglionic sheath is structured upon a complex fibrocellular framework. A tridimensional network of anastomosed connective tissue lamellae constitutes the extracellular space. In the deep ganglionic region these lamellae display alkaline phosphatase activity. Sheath cells appear embedded in network fenestrae. The most peculiar of these are the superficial voluminous globular cells. Its cytoplasm appears built of a lipoprotein network containing glycogen and ?lipofuscin pigments.? These two latter substances appear to undergo seasonal changes. The gland cells seem to be unicellular endocrine glands, containing many droplets giving positive reaction for carbohydrates, lipids and proteins. Muscle cells are placed throughout the sheath. The cytoplasm gives an intense reaction for proteins but does riot exhibit myofibrilles. These cells could play an important role in ganglionic movements and in addition could modify the amplitude of the extracellular sheath space. Pigment cells, contain