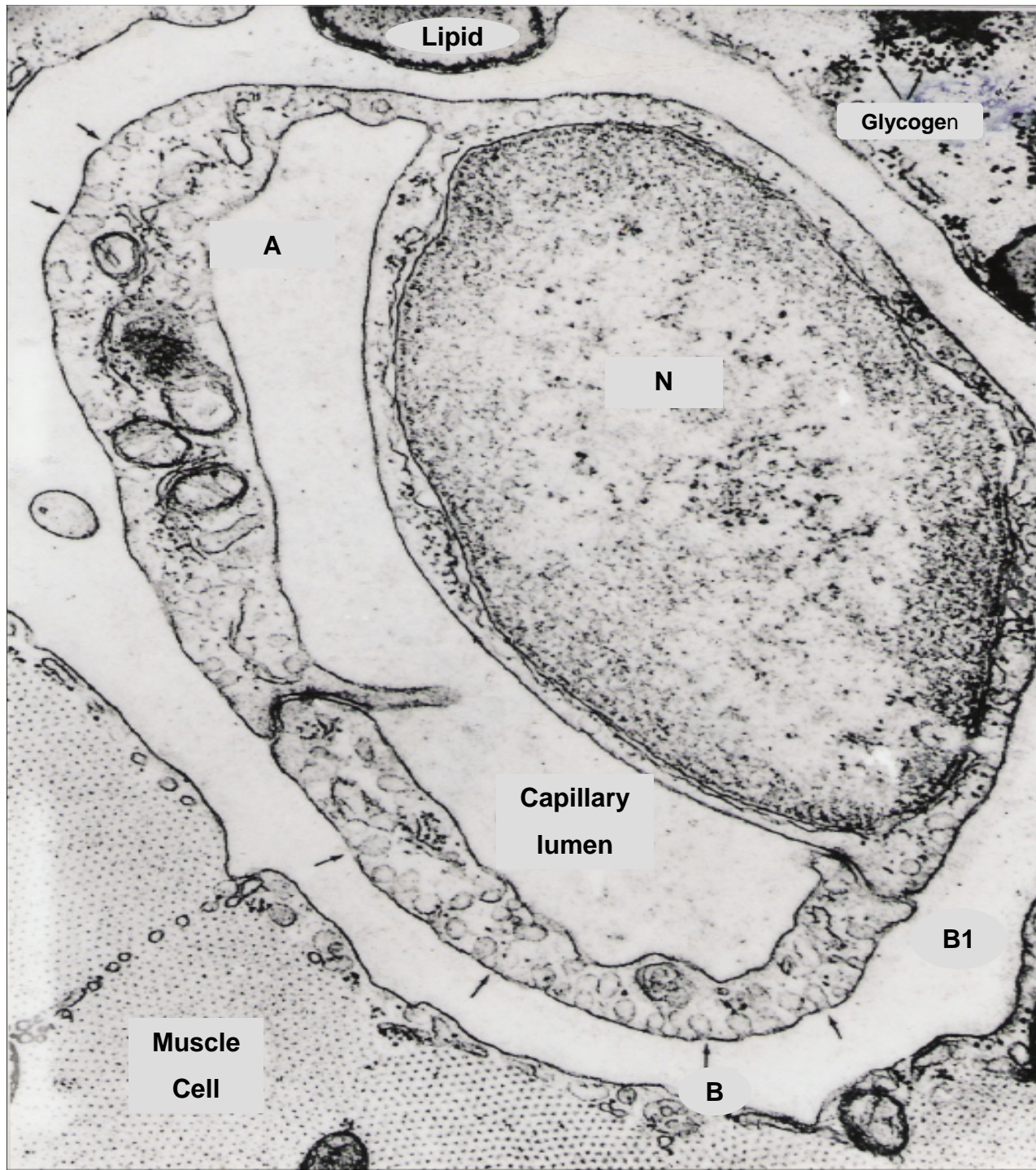


# CARDIOVASCULAR SYSTEM

**SCHOOL OF ANATOMICAL SCIENCES**





### **Endothelium of capillary**

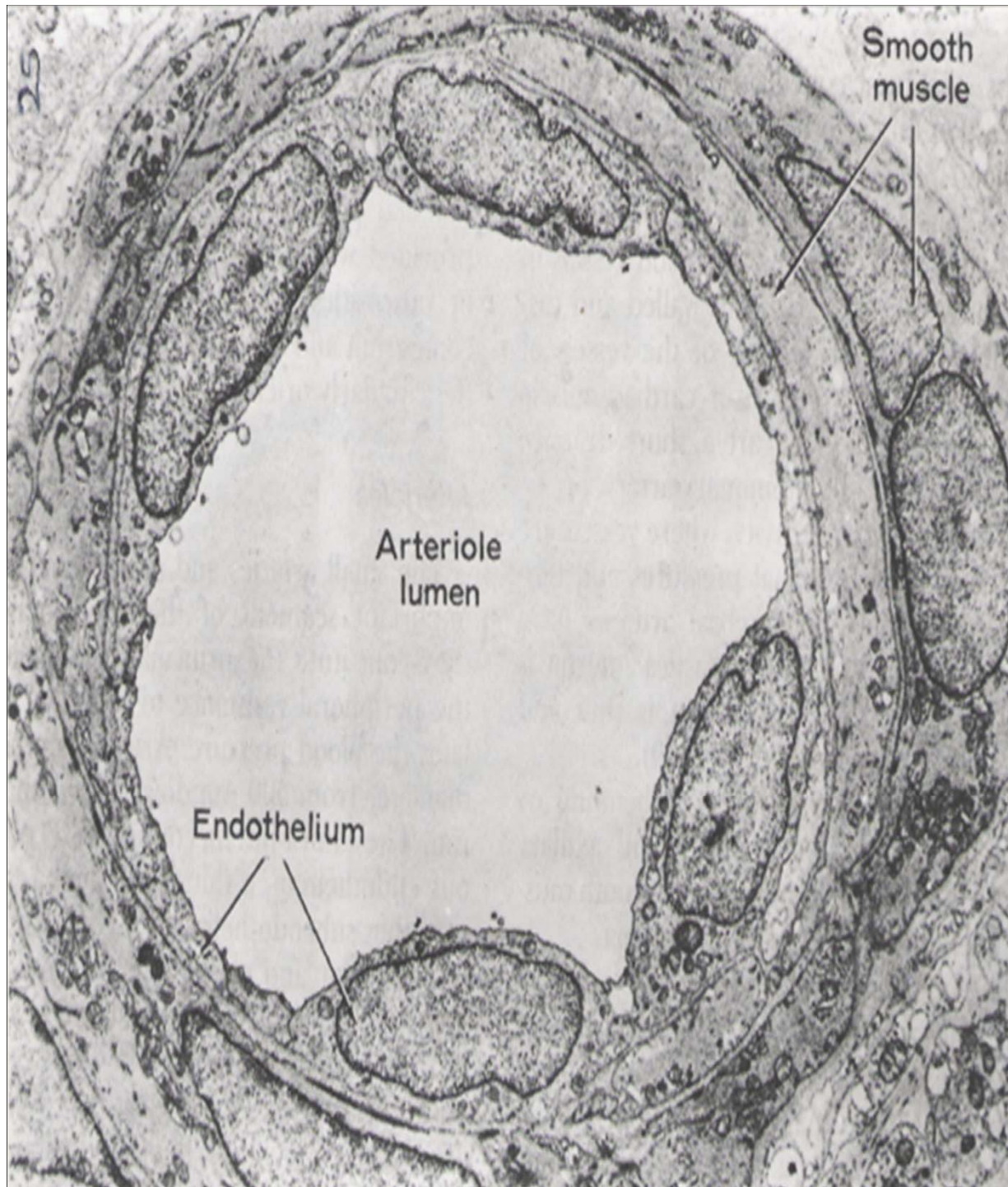
This EMG illustrates the structure of the endothelial lining of a continuous capillary found in skeletal muscle. NOTE:

- The relatively large elongated nucleus (N) in the cytoplasm of one of the endothelial cells.
- Part of another endothelial cell (B) joined to the other cell by tight and adherent junctions (B1).
- Pinocytotic vesicles (arrows) used to internalise and transport molecules across the endothelium.
- Transverse section through skeletal muscle at the bottom of the EMG.

### **Questions**

What are the functions of capillaries? Name the other capillary types, and possible locations in the body.

*(Fawcett, 'The Cell', p403)*



### **Arteriole**

This EMG illustrates the ultrastructure of an arteriole. NOTE:

- The tunica intima with squamous endothelial lining.
- Layer of smooth muscle with a folded cigar shaped nucleus of the tunica media.
- The surrounding connective tissue of the tunica adventitia.

### **Question**

What is the function of an arteriole?

*(Bloom & Fawcett, 1986)*