

Intercalary disc

Intercalary discs are found at the interface between individual heart muscle cells, where they perform the function of connecting complexes. On a microscopic view, they can be observed as dark structures taking the form of straight lines or steps. In the stair type, one can distinguish the transverse part, which goes at right angles to the chain, and the lateral part, which goes along the myofibrils.

3 types of cell junctions appear in the disc structure:

- **Fascia adhaerens**
 - We find it in the transverse part of the disc. It anchors the actin filaments of neighboring sarcomeres.
- **Desmosome**
 - It ensures tensile strength and prevents the myocardium from tearing during contraction.
- **Gap junction (nexus)**
 - It is located on the side of the cell and allows easy passage of ions between cells. Thanks to this connection, the cells of the heart muscle join into a syncytium, and the contraction wave can proceed continuously in waves.

Links

Related articles

- Myocardium
- Cardiac conduction system

References

- JUNQUEIRA, Carlos L. *Základy histologie*. 1. edition. H & H, 2002. 502 pp. ISBN 80-85787-37-7.