

Supplementary material

Video clip from a patient covering 21.3 μm thickness of the ganglion with

63 virtual slices. 00:00: On the left side of the ganglion, with a nerve at the bottom. The three dark “spikes” are the “tips” of the incomplete septa. The nuclei of two neurons with nucleoli (dark dots within; called “upper” and “lower” neurons below) are seen and some perikaryons (cytoplasm) without nuclei at this level (one is above the upper neuron). Glial cells have small darker nuclei. Among the cells, the neuropil is composed of axons. The thin layer of telocytes and their telopodes is around the ganglion (best seen on the top, partly tangential view as thin “filaments”); 00:07: The “lower neuron” is no longer visible. Several neurons with nuclei and nucleoli appear above the upper neuron (UN). Below the UN is a smaller neuron with a pale perikaryon. The tip with the lowest bottom incomplete septum (BIS) was the largest; 00:10-00:15: The UN and some of the other neurons have small vacuoles in their perikaryon. The neuropil forms a halo around the UN; 00:16: The tip of the BIS is closer to the surrounding connective tissue. A dark irregular perikaryon was observed with tiny vacuoles to the left of the tip; 00:20: BIS is open to the surroundings; 00:24: At the tip of the BIS, a larger pale neuron with a nucleus and nucleolus is observed. Two smaller, darker perikaryons (pre-apoptotic cells) were present on the left side of this cell. Of these, the upper one is triangular. A well-circumscribed pale area is on the place of the UN (see 00:00) and above it a new neuron with a pale perikaryon and nucleus; 00:32: The lower dark neuron is larger, and the BIS is shallower; 00:35: The dark pre-apoptotic neuron is closer to the BIS and has vacuoles. To the left, another dark neuron with vacuoles appears in connection with the telopode, showing a very short defect. To the right in the middle part of the ganglion, there is a pale neuron also touching the bordering telopode; 00:39: The distance between the right dark neuron and the BIS is larger, and three thin telopodes are observed in the invagination of the BIS. The telopode-layer is intact in the left dark neuron on the opposite side, as well as in the pale

neuron; 00:48: The pale neuron disappeared, whereas the distance between the two pre-apoptotic neurons and the bordering telopodes increased. There were fragments of unknown origin at the base of the remaining BIS (parts of the pre-apoptotic neuron?); 00:56-01:03: The right pre-apoptotic neuron and fragments disappeared in the upper part of the ganglion and the larger irregular structure was opened to the surrounding tissue. UN: Upper neuron; BIS: Bottom incomplete septum.