Results

A total of 11,340 thin sections from 13 of 22 specimen-blocks were observed with a light microscope (Table 1). The observations were carried out with 7 points of view in the epidermis: i) the cells coming into the basal layer; ii) the division of LCs; iii) the apposition of the cells having darkstained nuclei and pale stained ones; iv) LCs with processes approaching the granular or the cornified layer; v) LCs in the granular or the subgranular layer; vi) melanocytes, LCs or Merkel cells in the basal layer and nerves coming from the dermis and vii) the others.

Of these points, particularly the 4th point, a feature of the swelling of the process terminal of the clear cell was observed for the first time beneath the cornified layer of the epidermis

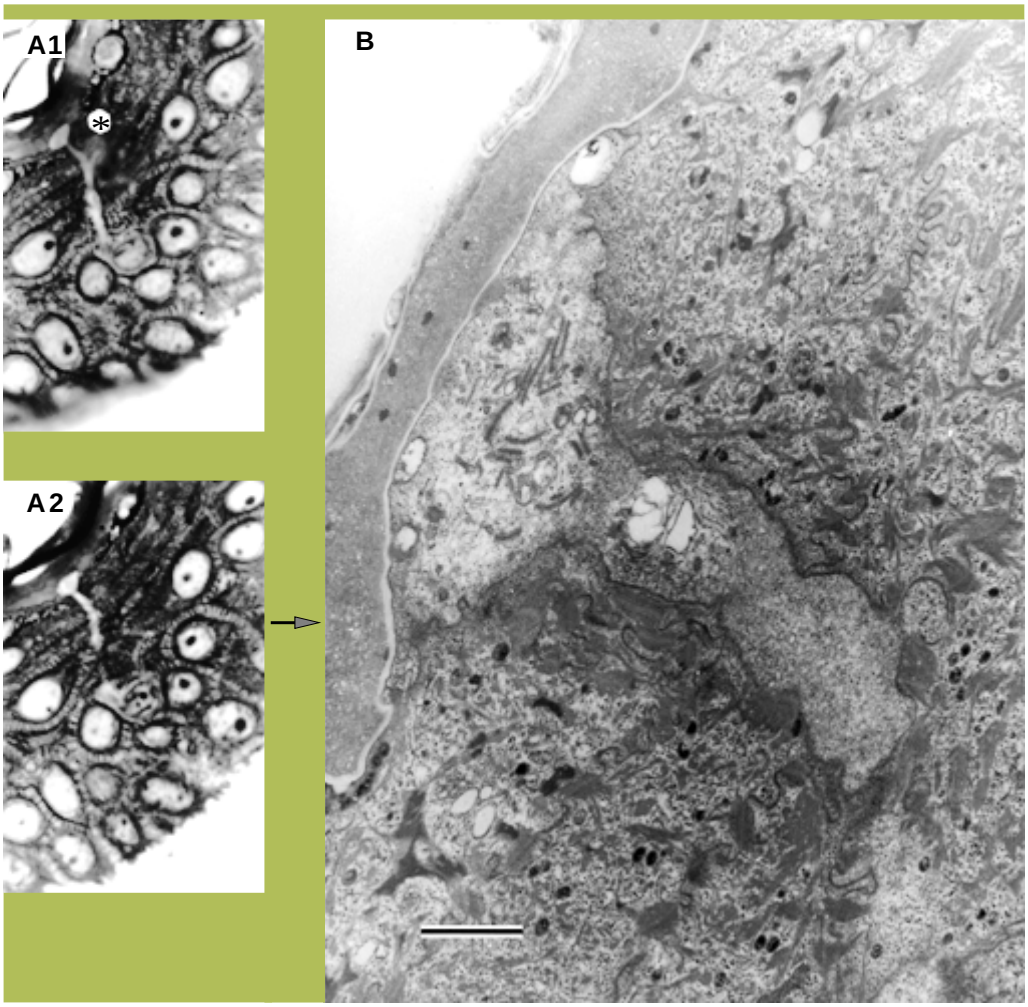

Fig. 2. Illustrations of a Langerhans cell (LC) with a process. The terminal swelling (button) makes contact directly beneath the cornified layer of the epidermis. **A1 and 2:** Views of serial thin sections of the cell. The continuity of the process to the cell body can be confirmed from these 2 pictures. × 750 (oil). ∗, Undulated part of the section, inadequate to ultrathin sectioning. **B:** The ultra-structure of the process terminal swelling (button) taken from a thin section of the area seen in A2. In the button, a number of Birbeck granules and a few vacuoles of various sizes are seen. The outline of the button is rugged, probably due to the exocytosis of those organelles, while the process of the cell has few organelles. × 13,125 (bar = 1 μm).