LYMPHOGRAPHIA

PACINIAN CORPUSCLE IN HUMAN LYMPH NODE

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COMMENT

Pacinian corpuscles (PC), also called lamellated corpuscles or Vater-Pacinian corpuscles, are dermal sensory receptors involved with detection of vibration and touch. In humans, PC are mostly found in skin and are most prominent in the hairless skin of the hands and feet (1).

Fig. 1. Pacinian corpuscle (PC) within lymph node hilum (H&E stain, magnification x100). The patient was a 19-year-old male with inguinal lymphadenopathy and no other significant abnormalities. He underwent an excisional biopsy of left superficial inguinal lymph nodes. The examination of the lymph nodes revealed lymphoid hyperplasia. Two separate, well-developed and morphologically complete PC were discovered in the vascular hilum of one of the lymph nodes. There were afferent myelinated neuronal axons connected to the PC.
This report is the first description of PC in human lymph node to the best of the authors' knowledge. This discovery raises questions whether PC serve an important function in lymph nodes and the lymphatic system in general. Fabian postulated a possible relationship of PC with the lymphatic system in cats (2,3). However, her observations have not been confirmed. Others postulated that visceral PC might serve a vascular regulatory function (1). In our case, the PC were indeed present in the vascular hilum in close relationship to blood and lymphatic vessels. On the other hand, the authors' experience and lack of previous case reports of PC in human lymph nodes suggest that PC are exceedingly rare at this site. It is possible that this is a purely incidental finding, and PC in lymph nodes are ectopic in nature.

REFERENCES

3. Fabian, G: The demonstration of the lymphatic pathways of the Pacinian corpuscles in the mesojejunum of the cat. Lymphology 12 (1979), 71-76.

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