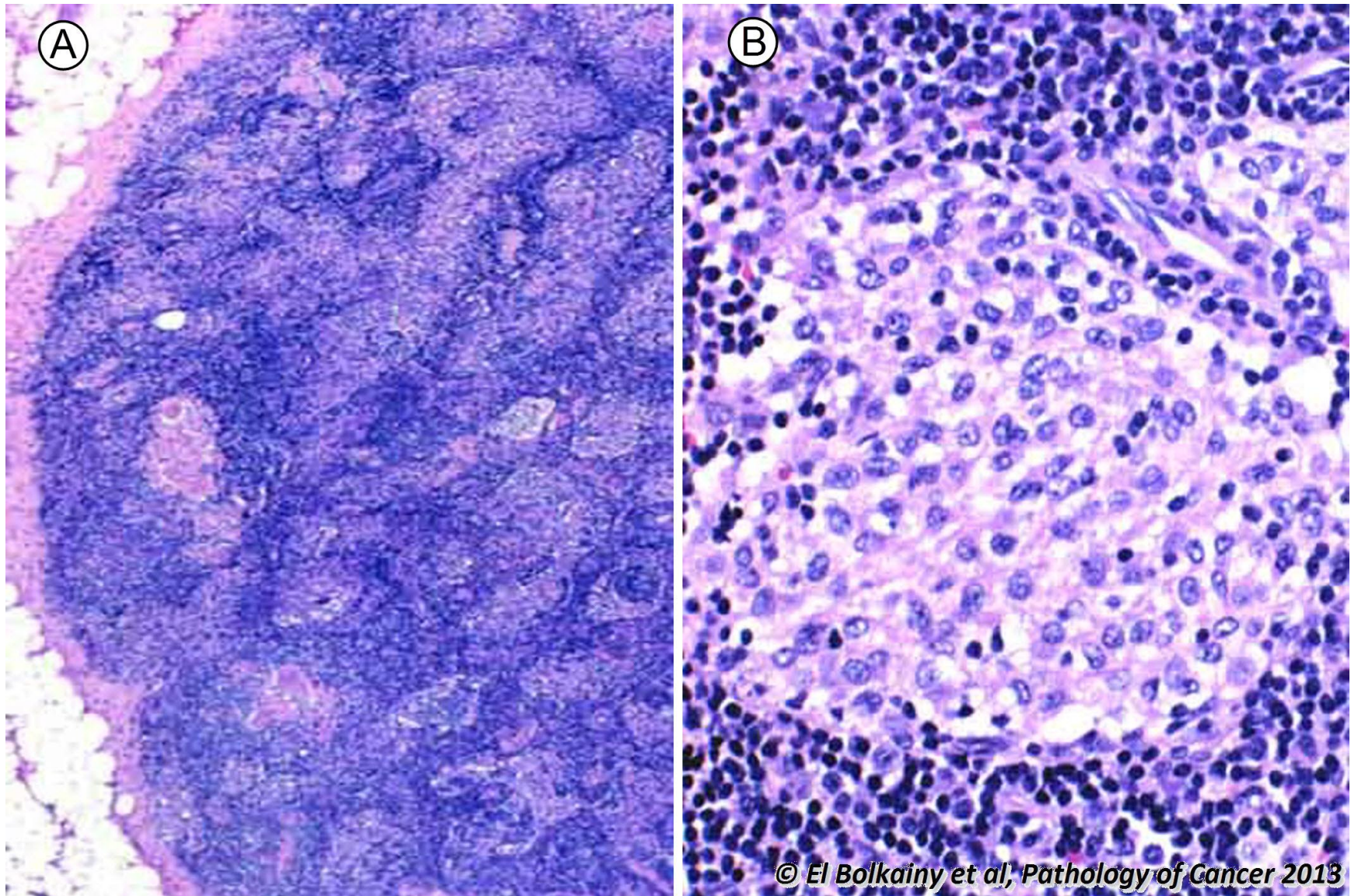


## Chapter 26

# Histiocytic and dendritic tumors

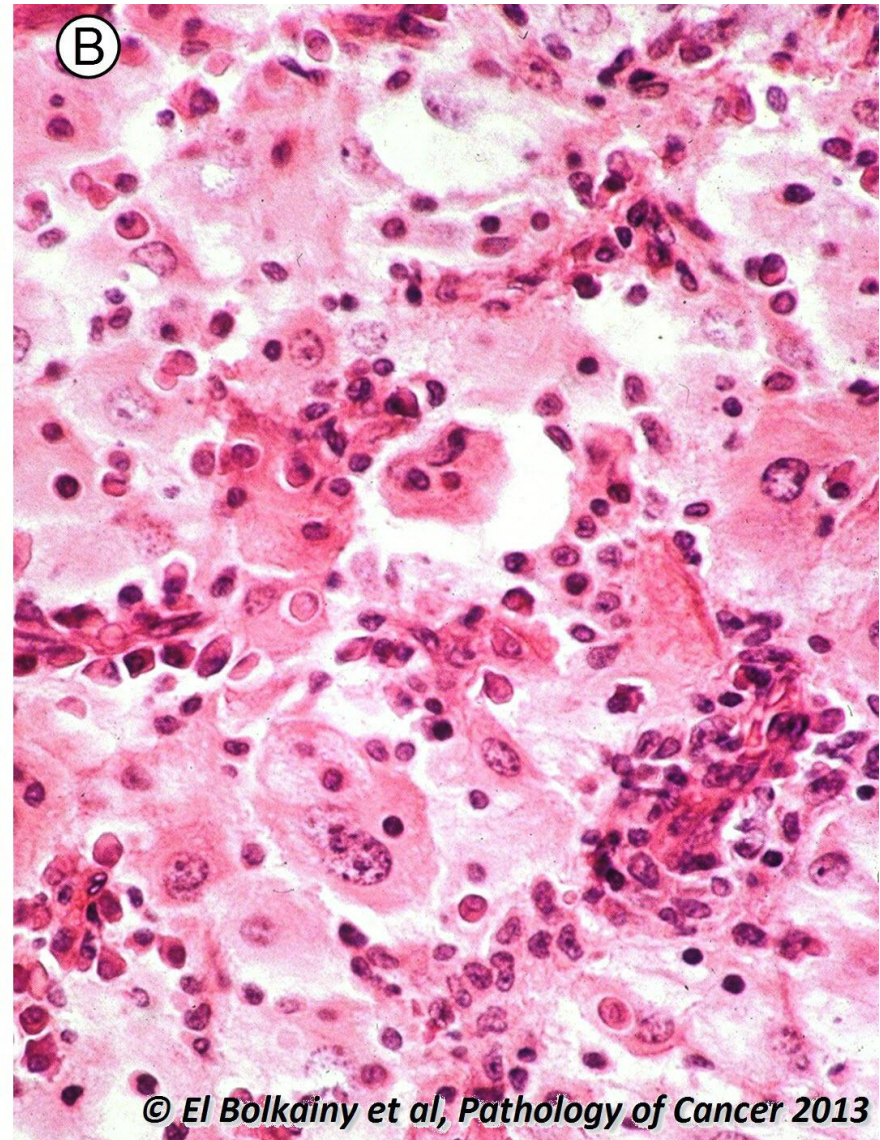
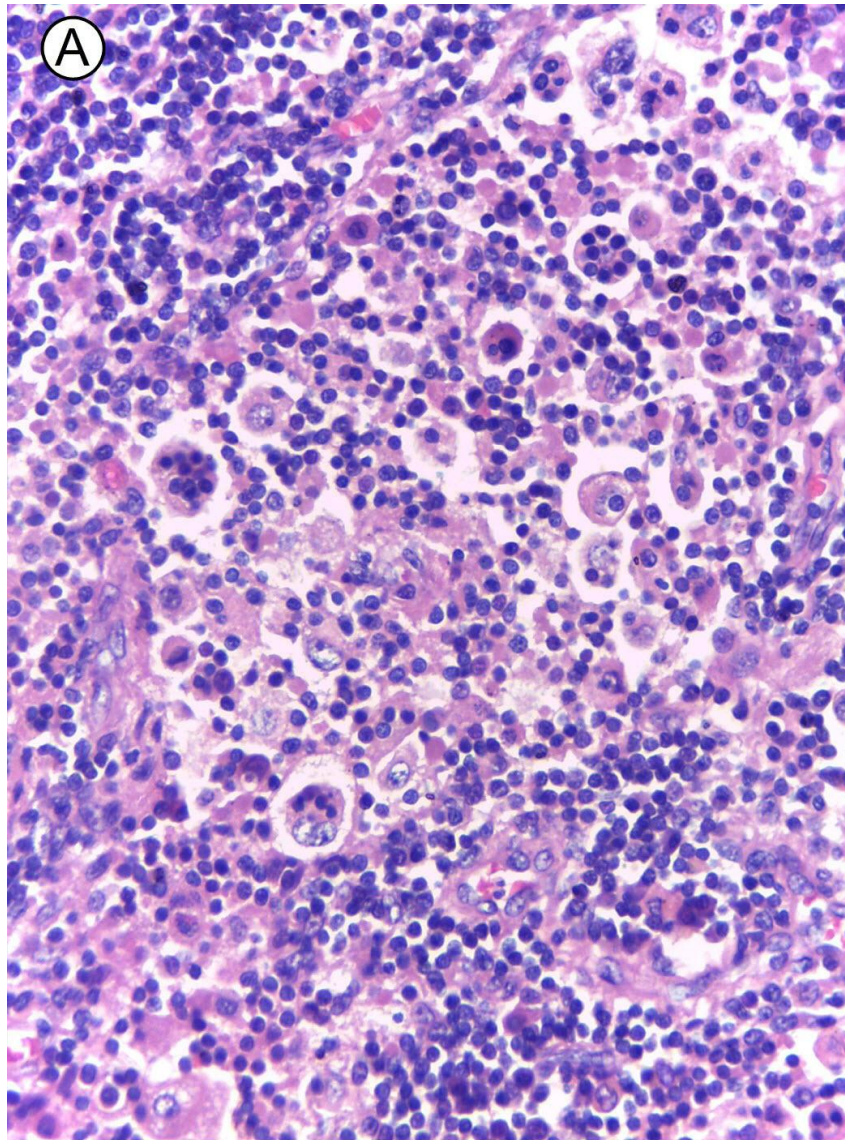
26.1 Reactive sinus histiocytosis of lymph node, histology.



**Picture 26-1** Reactive sinus histiocytosis of lymph node, histology. There is reactive hyperplasia of histiocytes lining the sinuses, filling the lumen, but, preserving sinus pattern. **A** Low and **B** high power.



26.2 Sinus histiocytosis with massive lymphadenopathy in lymph node (Rosai-Dorfman disease), histology.



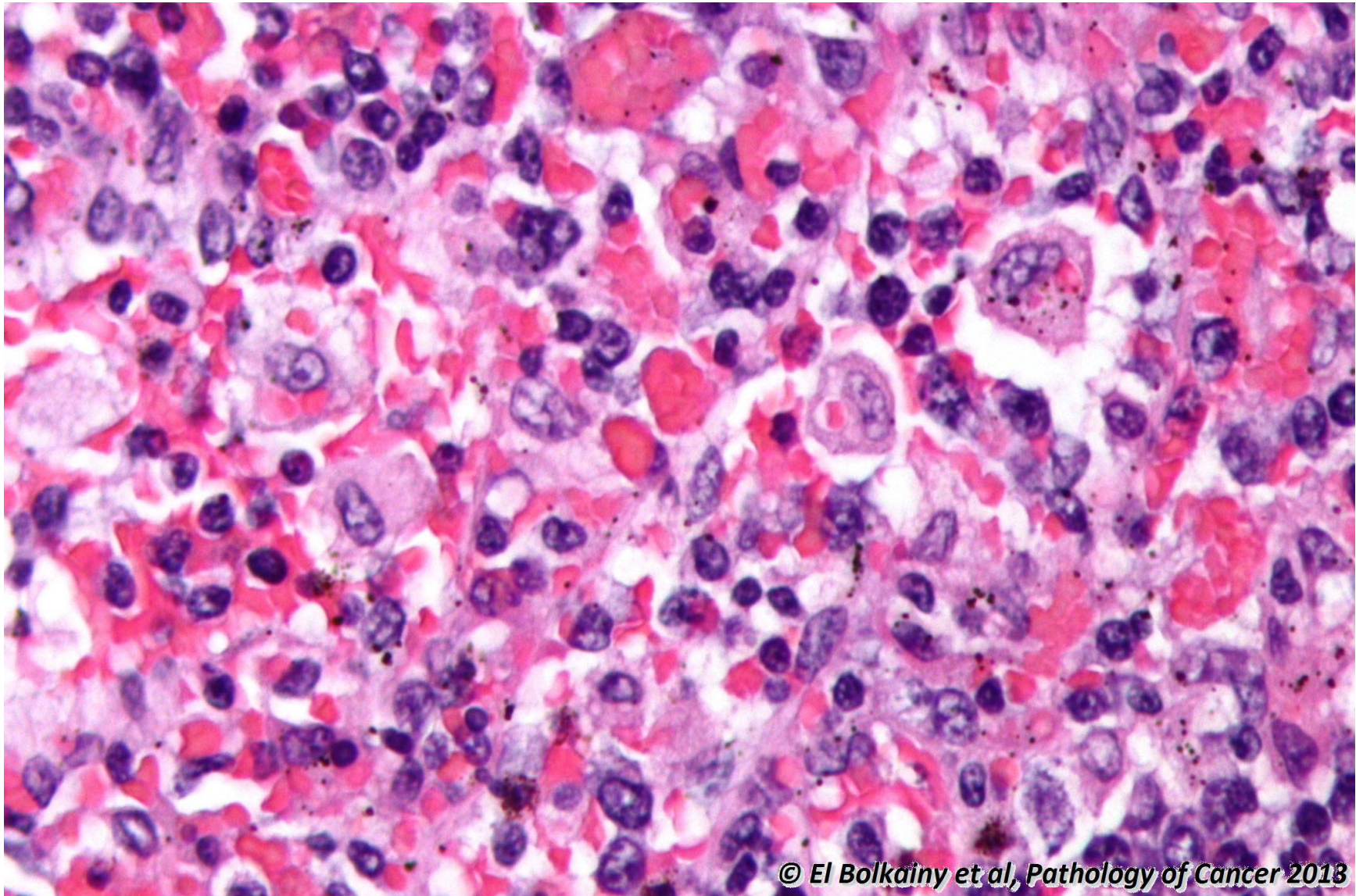
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**Picture 26-2**

**Sinus histiocytosis with massive lymphadenopathy in lymph node (Rosai-Dorfman disease), histology.**  
**A** The sinuses are mainly affected. **B** The diagnostic feature is the presence of intact lymphocytes in the cytoplasm of large histiocytes (emperipolesis). The cells are immunoreactive to CD163 and CD68.



### 26.3 Hemophagocytic Lymphohistiocytosis, histology.



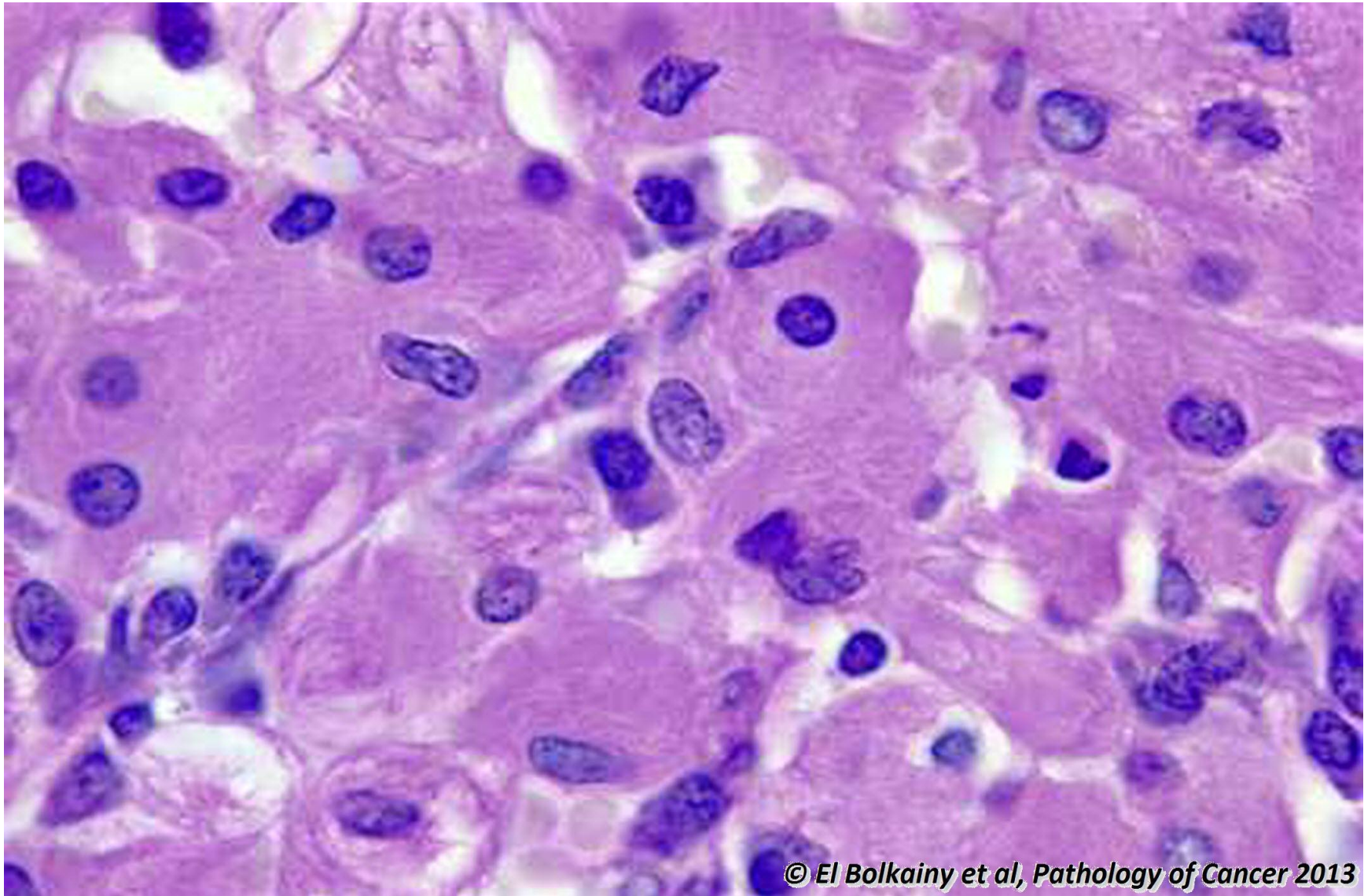
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**Picture  
26-3**

**Hemophagocytic lymphohistiocytosis, histology.** There is phagocytosis of both red and white blood cells. The cells are immunoreactive to CD163 and CD68.



## 26.4 Gaucher disease, histology.



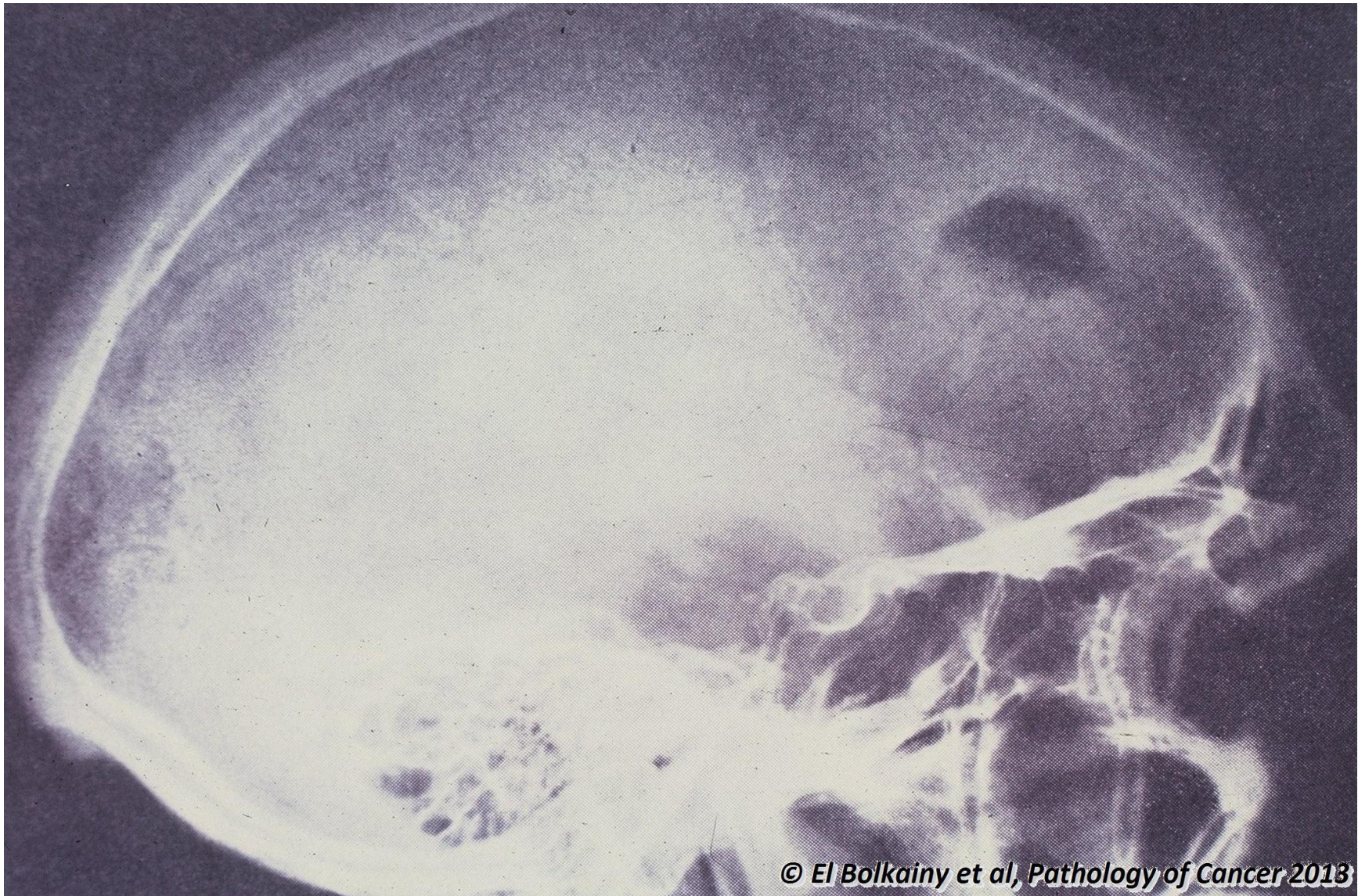
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**Picture  
26-4**

**Gaucher disease, histology.** The histiocytes are distended by the stored glucocerebroside. The cytoplasm is abundant, non-vacuolated with "wrinkled silk" or granular appearance. The nuclei are eccentric. The cells are positive for PAS after diastase.



26.5 Langerhans cell histiocytosis (eosinophilic granuloma), radiography of the skull.



**Picture 26-5** Langerhans cell histiocytosis (eosinophilic granuloma), radiography of the skull. A characteristic localized form of the disease producing a rounded, well defined osteolytic defect. Prognosis of this pattern is most favorable.



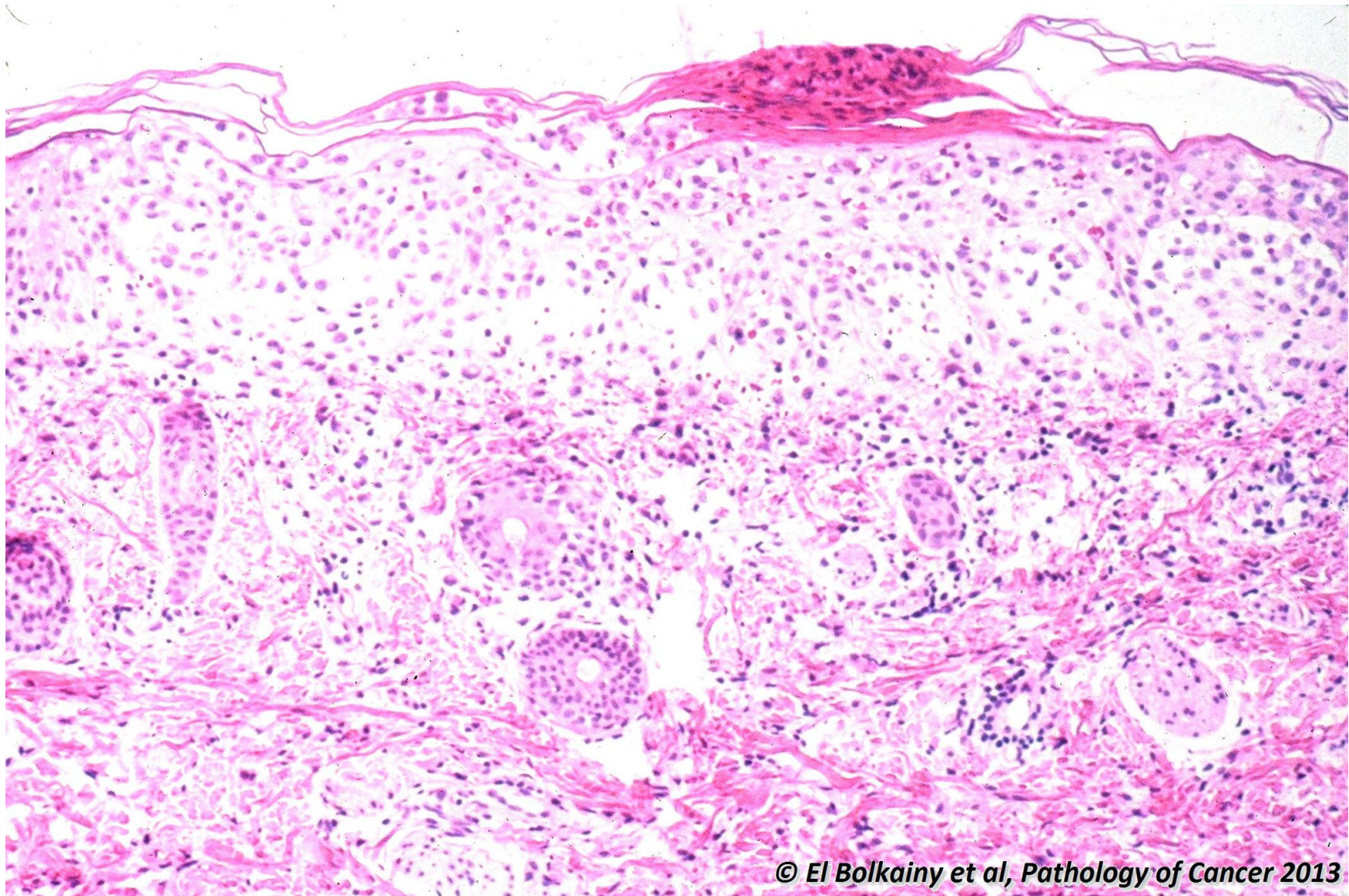
26.6 Langerhans cell histiocytosis (Letterer-Siwe disease).



**Picture 26-6** Langerhans cell histiocytosis (Letterer-Siwe disease). This is an example of multisystem affection in infants. The picture shows multiple cutaneous lesions.



26.7 Langerhans cell histiocytosis (Letterer-Siwe disease), histology.

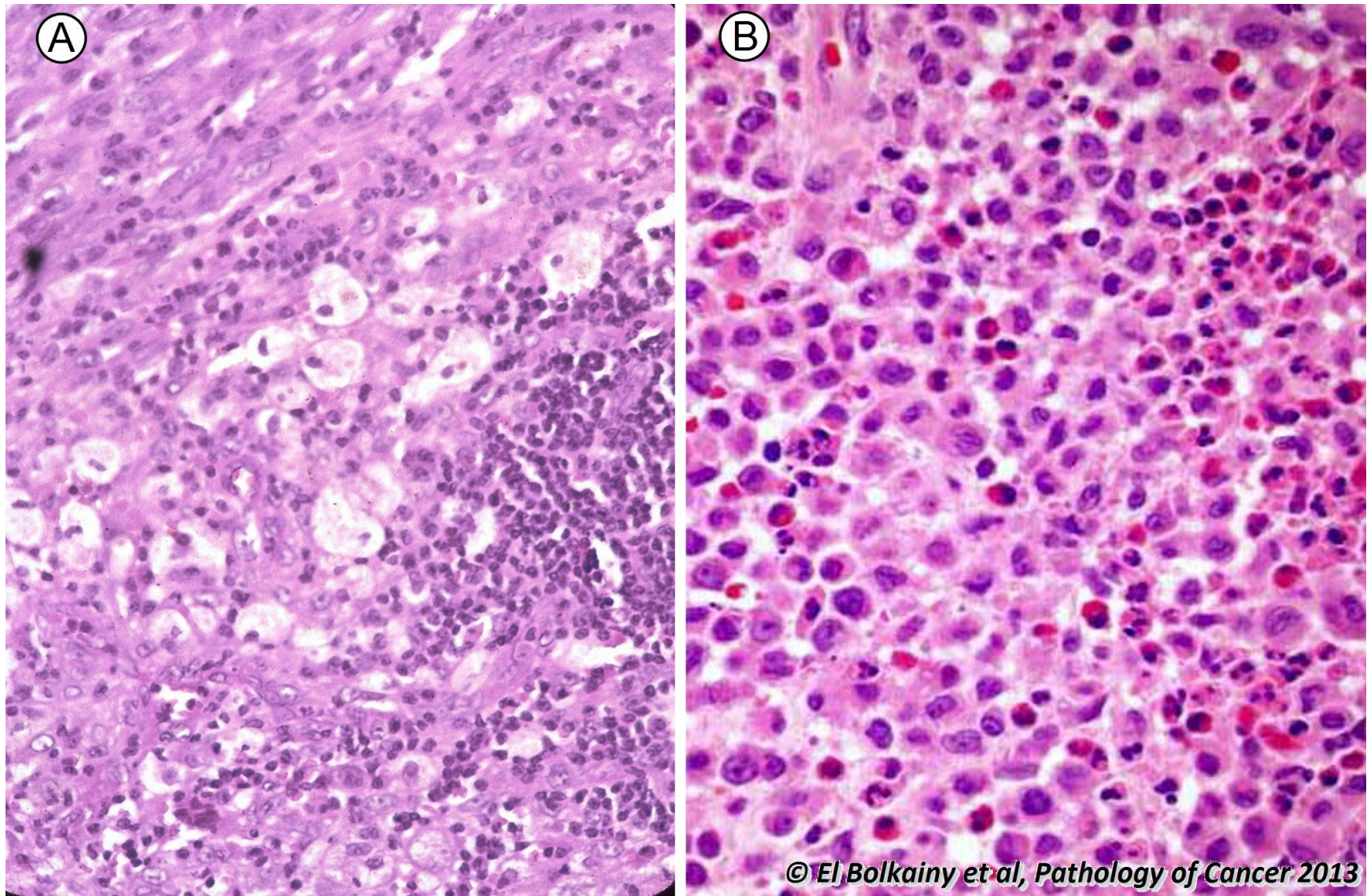


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**Picture 26-7** Langerhans cell histiocytosis (Letterer-Siwe disease), histology. Skin biopsy showing an infiltrate of Langerhans cells with invasion of epidermis (epidermotropism) and ulceration.



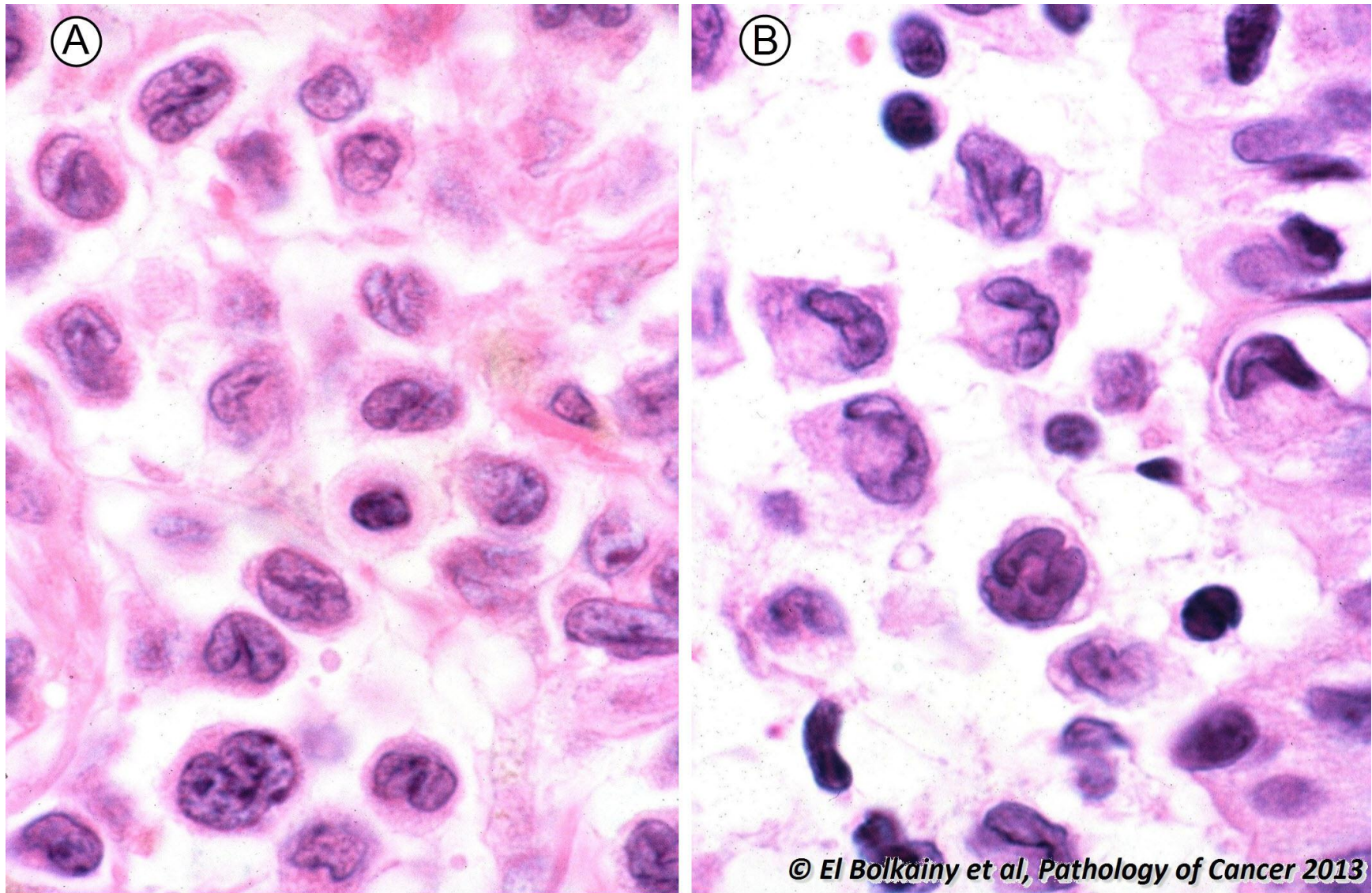
26.8 Langerhans cell histiocytosis, histology.



**Picture 26-8** Langerhans cell histiocytosis, histology. A and B Low power showing a dense infiltrate with focal collection of eosinophils.



26.9 Langerhans cell histiocytosis, histology.

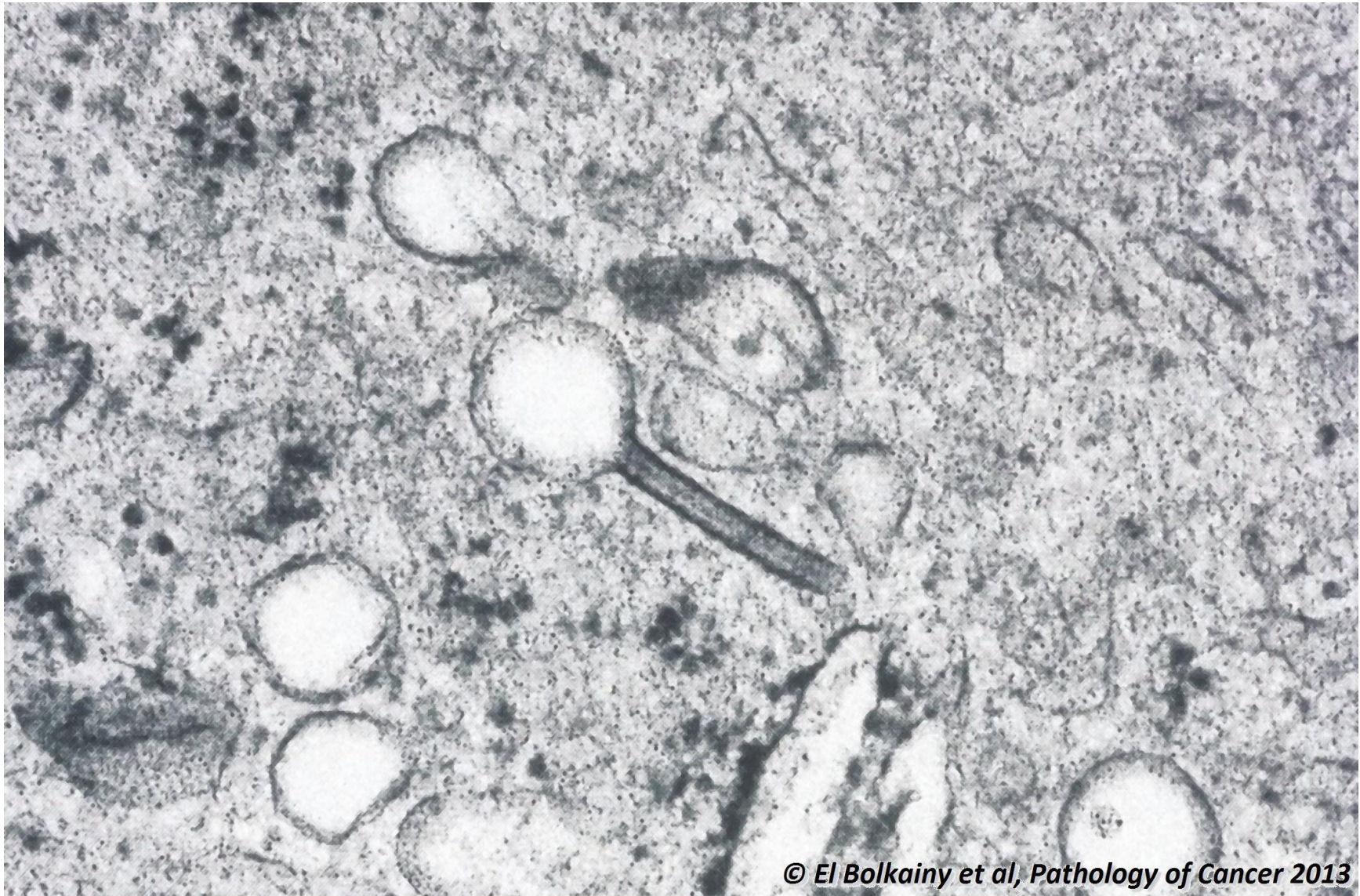


**Picture 26-9**

**Langerhans cell histiocytosis, histology.** A and B High power. Langerhans cells are characterized by abundant eosinophilic cytoplasm, non-dendritic surface, eccentric indented and folded nucleus with grooves. The cells are immunoreactive to Langerin, CD1a and S-100.



26.10 Langerhans cell histiocytosis, electron microscopy.

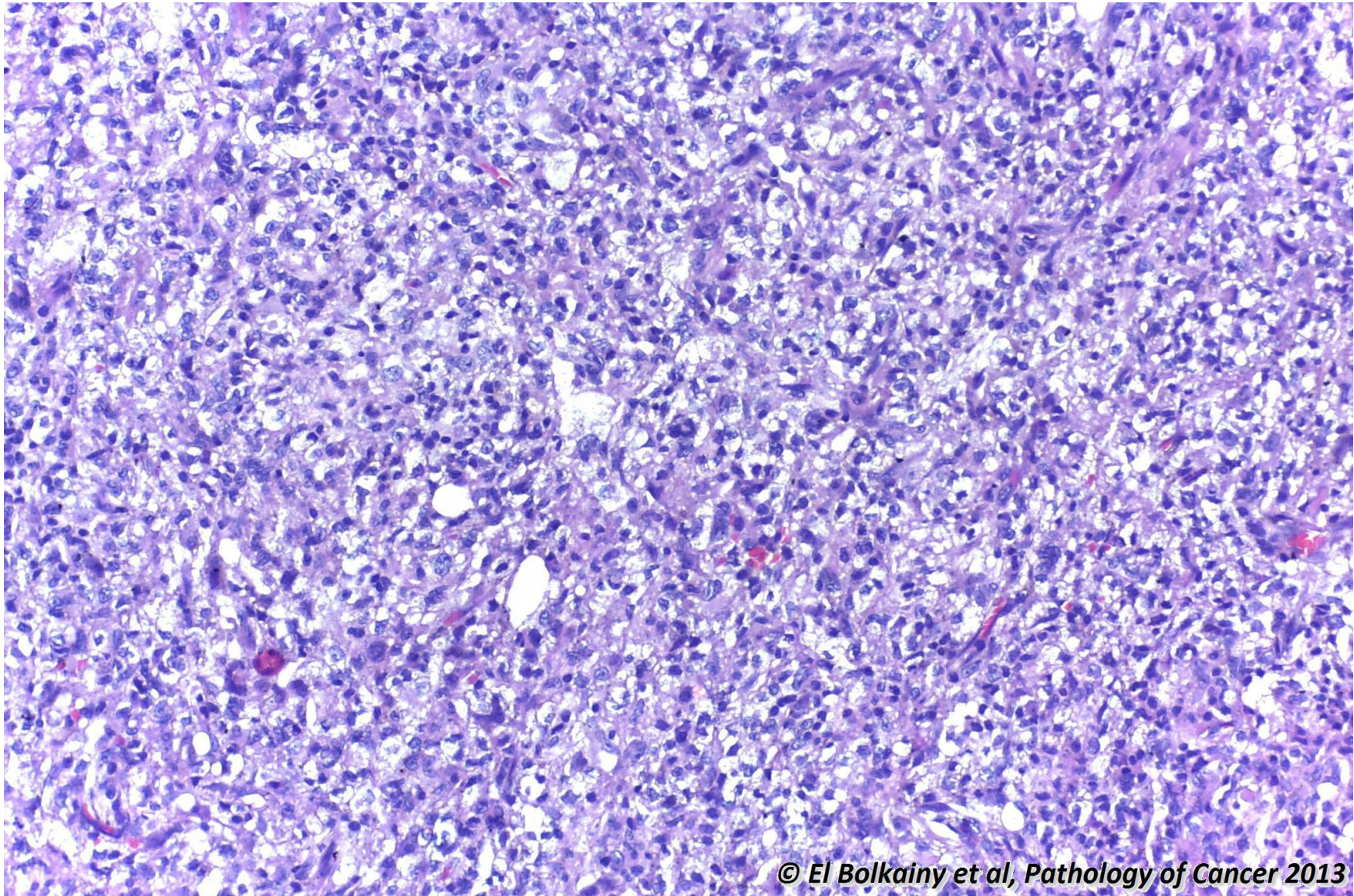


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**Picture 26-10** Langerhans cell histiocytosis, electron microscopy. The racket-shaped Birbeck granules are diagnostic of Langerhans type neoplasms. The granules are the store-house of Langerin; the specific marker of this disease.



26.11 Xanthoma of the eye lid, histology.

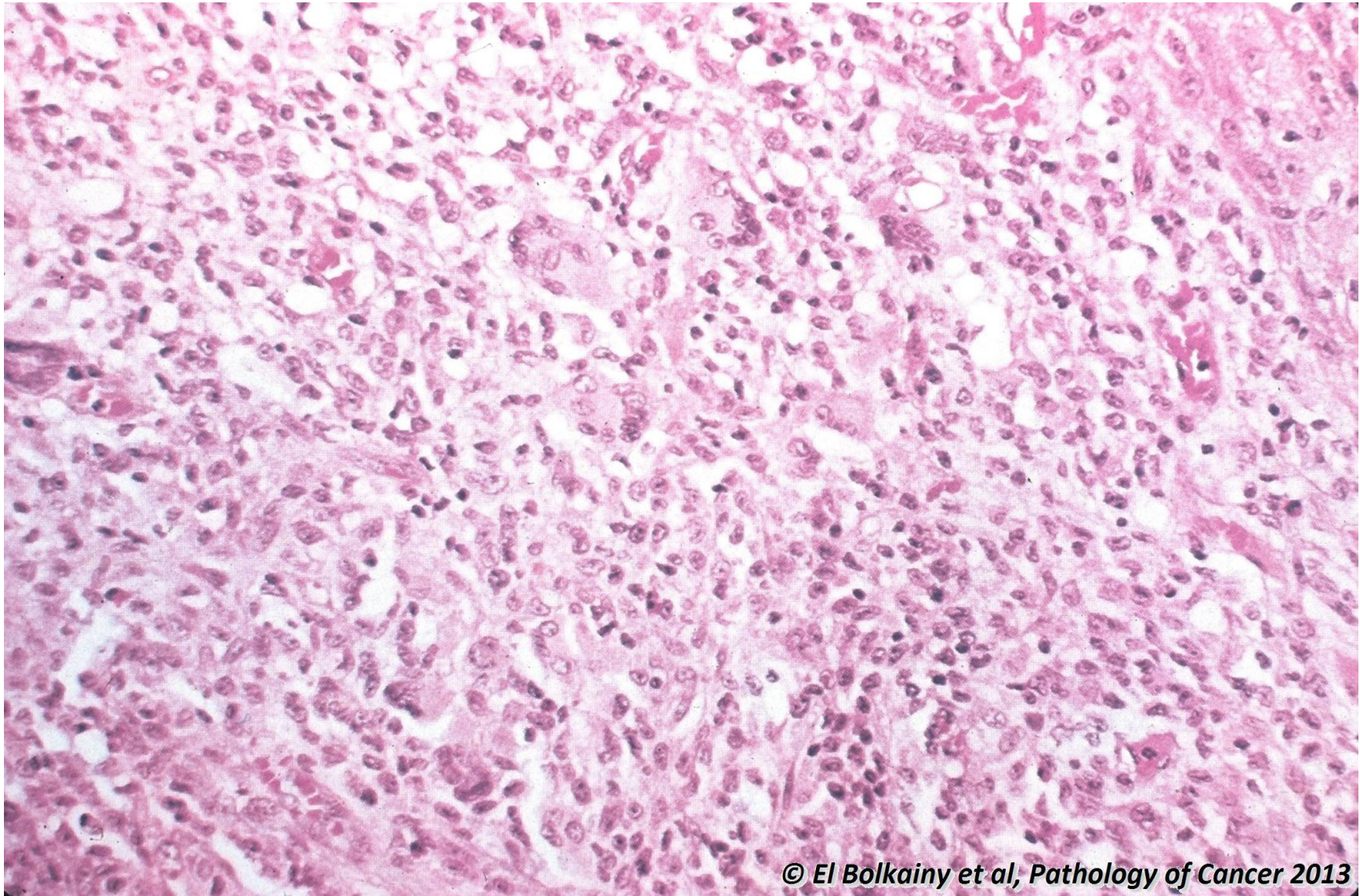


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**Picture 26-11** Xanthoma of the eye lid, histology. This is an example of benign non-Langerhans cell histiocytosis. The cytoplasm of histiocytes is clear and foamy (rich in lipid) and nuclei are uniform and normal. Immunostains: CD 68 positive.



26.12 Juvenile xanthogranuloma of skin, histology.



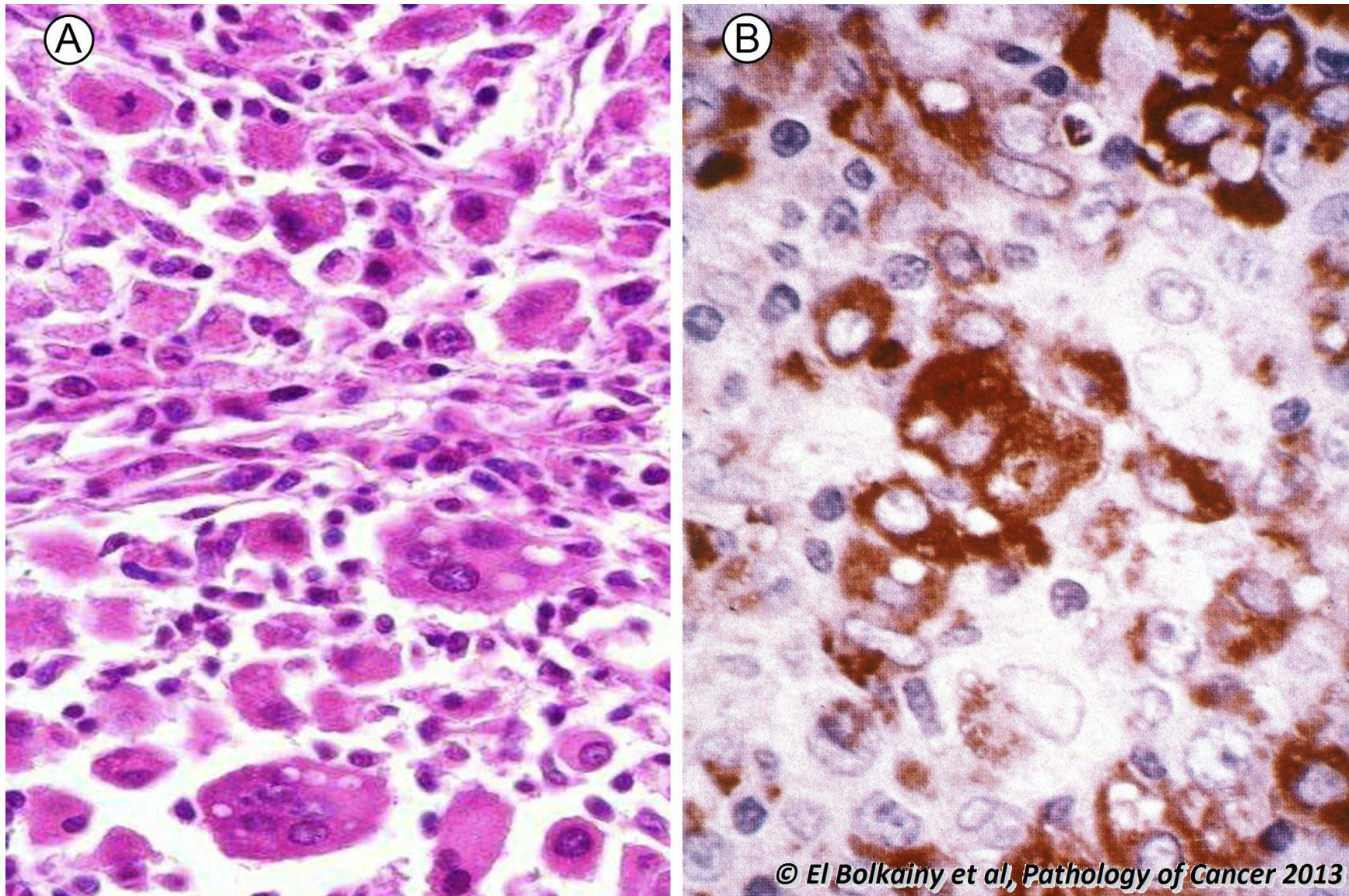
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**Picture  
26-12**

**Juvenile xanthogranuloma of skin, histology.** This is another example of benign non-Langerhans cell histiocytosis. The tumor is rich in histiocytes (CD68 positive, S-100 negative), with eosinophilic cytoplasm and oval non-indenting nuclei. Touton giant cells indented with multiple peripherally located nuclei are characteristic.



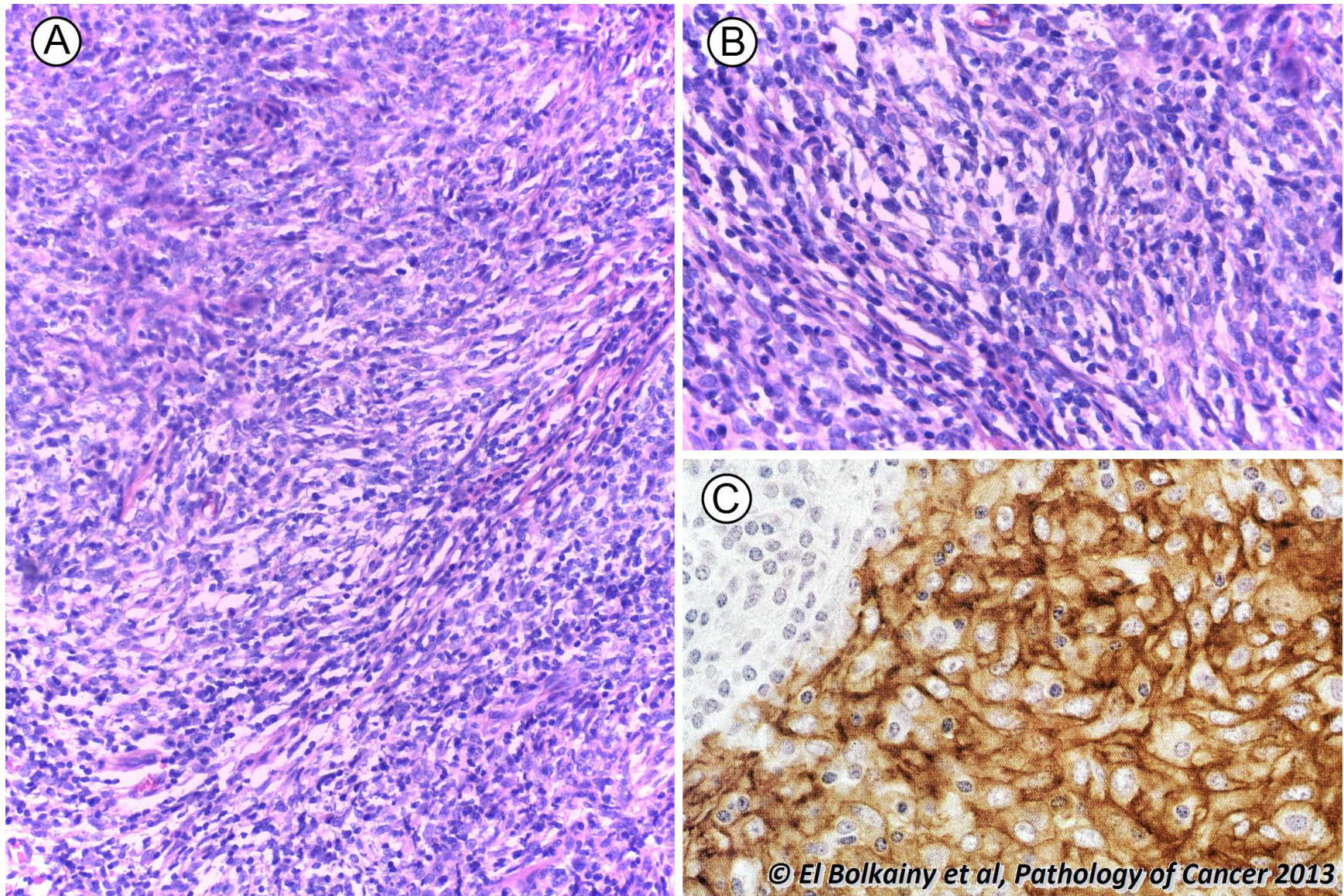
26.13 Histiocytic sarcoma, histology.



**Picture 26-13** Histiocytic sarcoma, histology. **A** Hematoxylin and eosin showing histiocytes of variable size and shape including giant forms. Cytoplasm is eosinophilic and nuclei are multiple, atypical with prominent nucleoli. **B** Immunostains: positive for CD68 and CD163 (but negative for S-100 and CD 30).



26.14 Follicular dendritic cell sarcoma, histology.

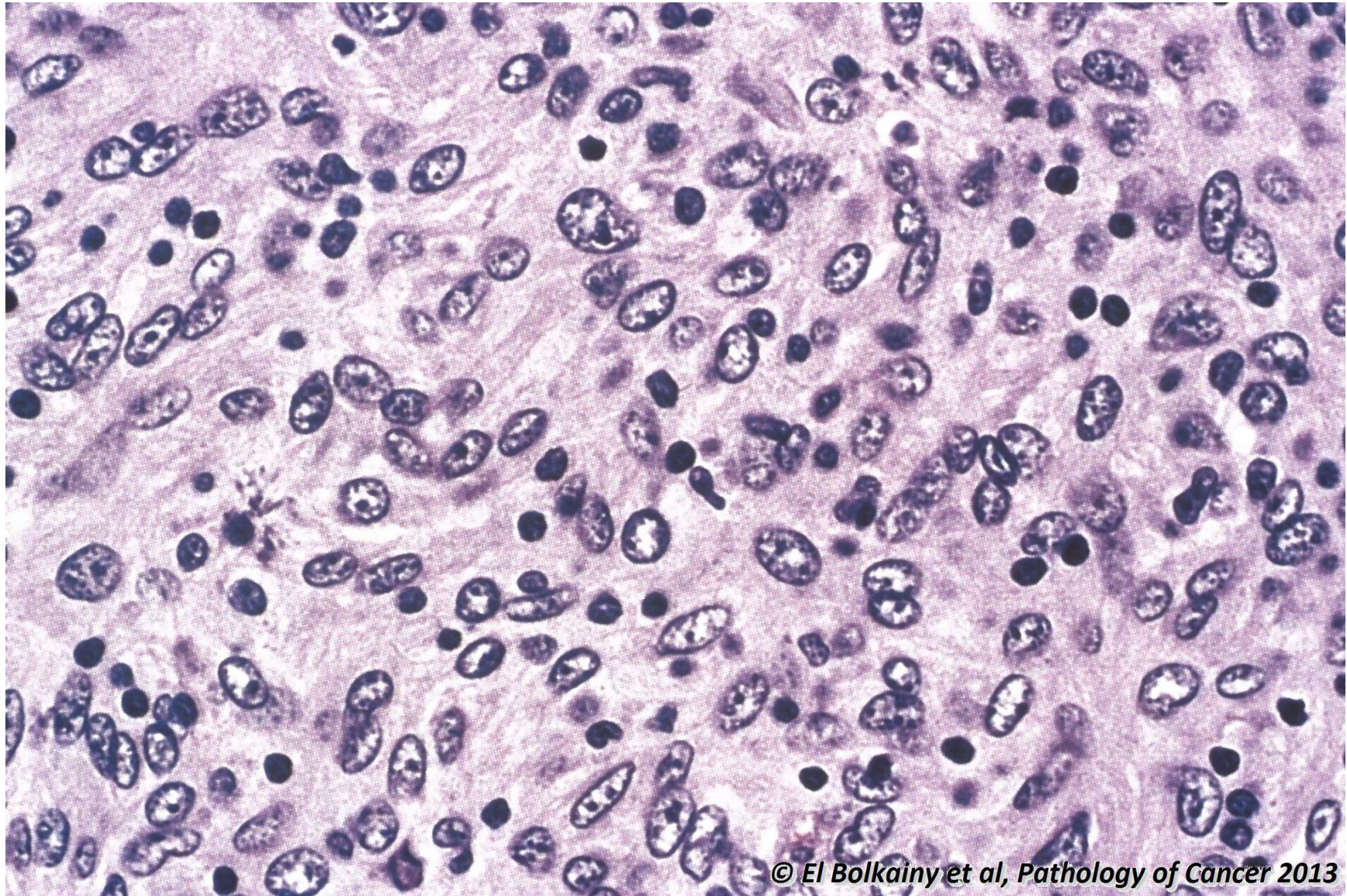


**Picture 26-14**

**Follicular dendritic cell sarcoma, histology.** A and B Routine H and E stain show spindle cells with whorled pattern associated with lymphocytes. C Immunostains: positive for CD 21 and CD 23 (but negative for other histiocytic and lymphoma markers).



26.15 Interdigitating dendritic cell sarcoma, histology.



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**Picture 26-15** Interdigitating dendritic cell sarcoma, histology. The neoplastic cells are spindle in shape associated with lymphocytes. Its immunoreactivity is paradoxical or metatypical (positive to both CD 68 and S-100).