Cirugía de Mohs en tumores periorbitarios

El papel del patólogo

96ª

REUNIÓN DE LA ASOCIACIÓN TERRITORIAL VALENCIANA DE LA SEAP

Viernes 3 de Abril de 2009

Luis Alfaro
Unidad de Patología

Arch Surg 1941; 42: 279-295

CHEMOSURGERY

A MICROSCOPICALLY CONTROLLED METHOD OF CANCER EXCISION

FREDERIC E. MOHS, M.D.
MADISON, WIS.

The object of this study was to develop a method for removing accessible cancers under complete microscopic control. The only practical way of obtaining this microscopic control involved the chemical

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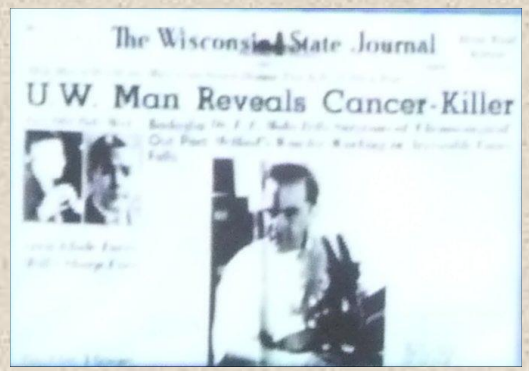
This project was aided by the Thomas E. Brittingham Fund, the Jonathan Bowman Memorial Fund and the Wisconsin Alumni Research Foundation.

From the Department of Surgery, Wisconsin General Hospital, and the McArdle Laboratory for Cancer Research, University of Wisconsin Medical School.

Valuable help in this work has been given by Prof. M. F. Guyer, of the department of zoology; Dr. E. R. Schmidt, of the department of surgery; Drs. R. L. McIntosh and O. H. Foerster, of the department of dermatology; Dr. W. E. Sullivan, of the department of anatomy, and Dean W. S. Middleton, chairman of the cancer committee, of the medical school of the University of Wisconsin.

FREDERIC E. MOHS



Fixative Z–108a

Stibnite, 80 mesh sieve.....	40.0 Gm.
Sanguinaria canadensis.....	10.0 Gm.
Zinc chloride, saturated solution.....	34.5 cc.

As was pointed out previously,[1] this preparation produces excellent fixation, so that the microscopic structure of the tissues is retained with little change except for some cell shrinkage and concentration of cytoplasmic and nuclear material.

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1. Mohs, F. E., and Guyer, M. F.: Pre-Excisional Fixation of Tissues in the Treatment of Cancer in Rats, Cancer Research, to be published.

TECHNIC

Though the proper type of fixative is invaluable for controlled fixation, the essential feature of the chemosurgical method lies in the microscopically controlled technic by which cancer tissue is removed.

The main steps in the technic are: 1. Application of the fixative agent to the surface of the tumor, the dose depending on the penetration desired. 2. Surgical excision of the fixed layer of tissue twenty-four hours later. 3. Location and mapping of the cancerous areas in relation to body landmarks by examination of microscopic sections made from the removed tissues. 4. Daily repetition of this process, only cancerous areas being treated, until a microscopically noncancerous plane is reached. These steps are more fully described in the following paragraphs.

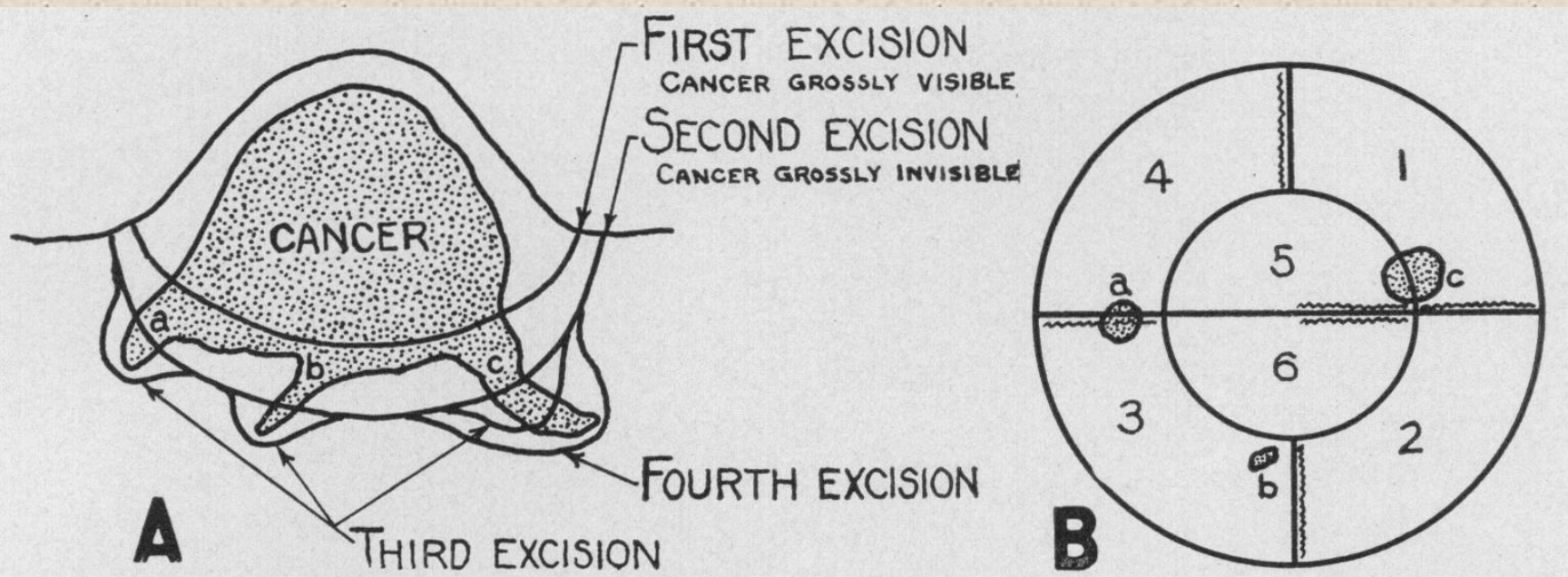


Fig. 1.—Diagrams showing the technic for locating cancer microscopically during the course of extirpation. The shaded areas represent cancer. A, side view of the lesion, showing deep extensions (a, b and c), and the four planes of incision. B, map of the top view of the second excised layer, showing how the deep extensions (a, b and c) are located microscopically by examining the sections made through the under surface of each specimen. In this example four excisions were required to reach a completely cancer-free plane.

The following day the fixed tissues are again excised and subjected to microscopic study. The process is then repeated until a completely noncancerous plane is reached.

From three to nine days is required for the remaining thin layer of fixed tissue to separate. Often it is necessary to cut the heavier fibrous strands causing adherence of this tissue. Blood vessels heal across, and therefore bleeding rarely occurs. The upper surface of this layer may also be sectioned if the occasion demands.

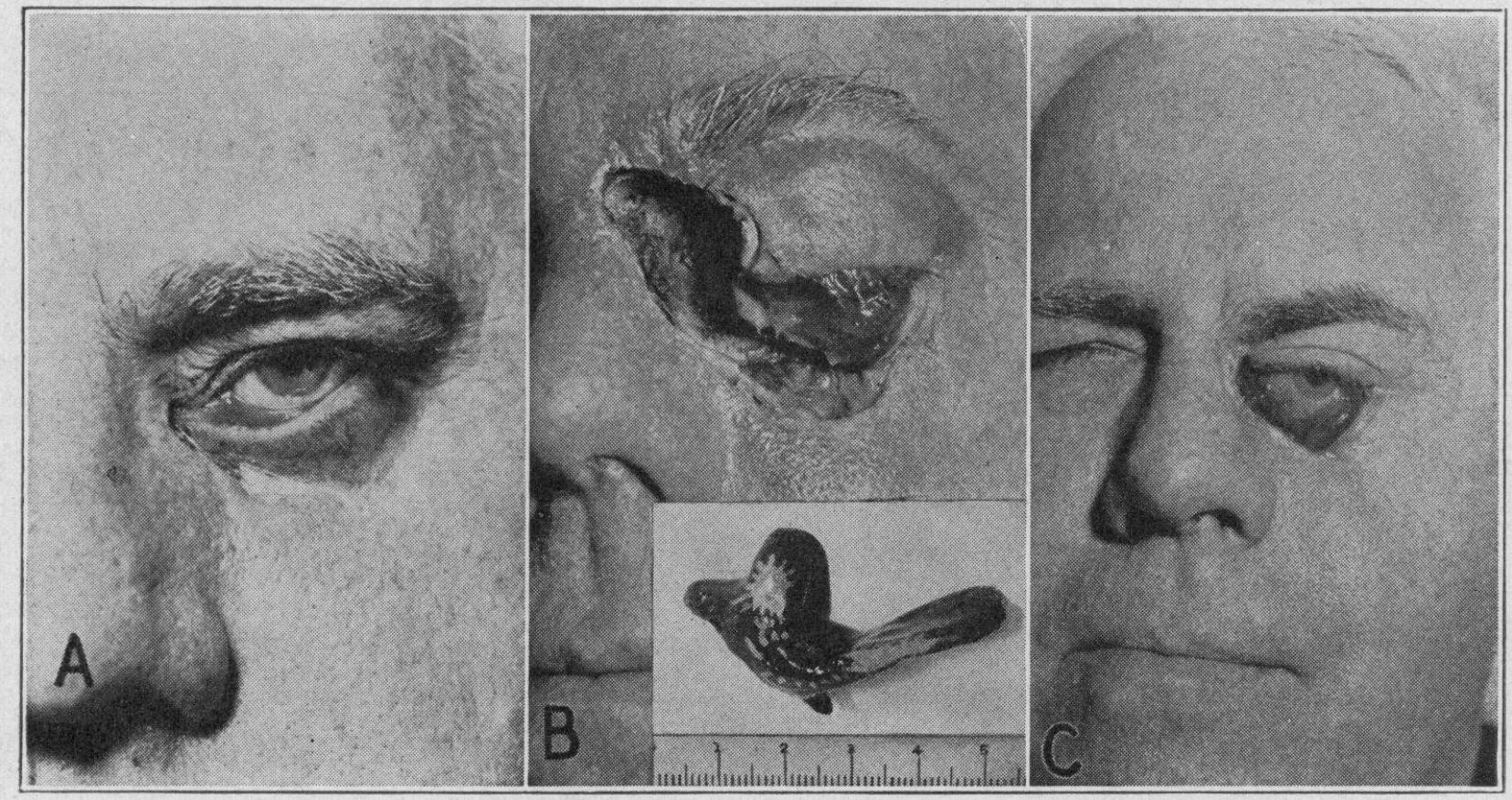


Fig. 6.—A, basal cell carcinoma, kept in check superficially for ten years by numerous radium treatments. B, condition at completion of active treatment, show¬ing the extensive deep spread of the cancer. Edema and chemosis are evident. The insert is a reconstruction of the actual mass of cancer, demonstrating the irregular extensions along the inferior and medial walls of the orbit, into the upper lid, onto the nasal bone and into the lacrimal fossa. C, defect three months later. There was no impairment of vision, but exposure of the conjunctiva required plastic repair of the lower lid. The patient remains free from cancer after two years.

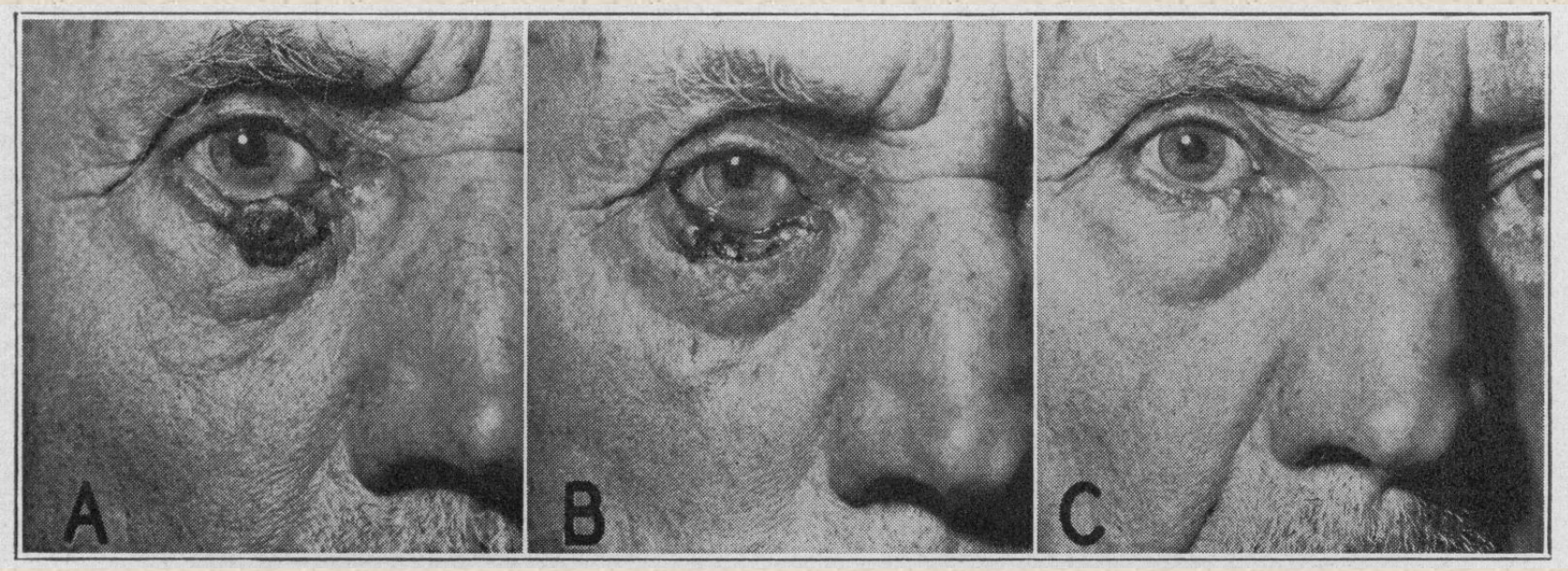


Fig. 5.—A, squamous cell carcinoma of the lower lid, including 3 mm. of the palpebral conjunctiva. B, condition after separation of the final layer of fixed tissue, eight days later. C, condition three months later. The patient remains free from cancer after one year.

Congelación

(Tromovitch)

la cirugía de tumores palpebrales1953
Mohs abandona el clururo de zinc para

Tromovitch TA, Stegman SJ: *Microscopically controlled excision of skin tumors: Chemosurgery (Mohs): Fresh tissue technique.* Arch Dermatol 1974; 110: 231-232

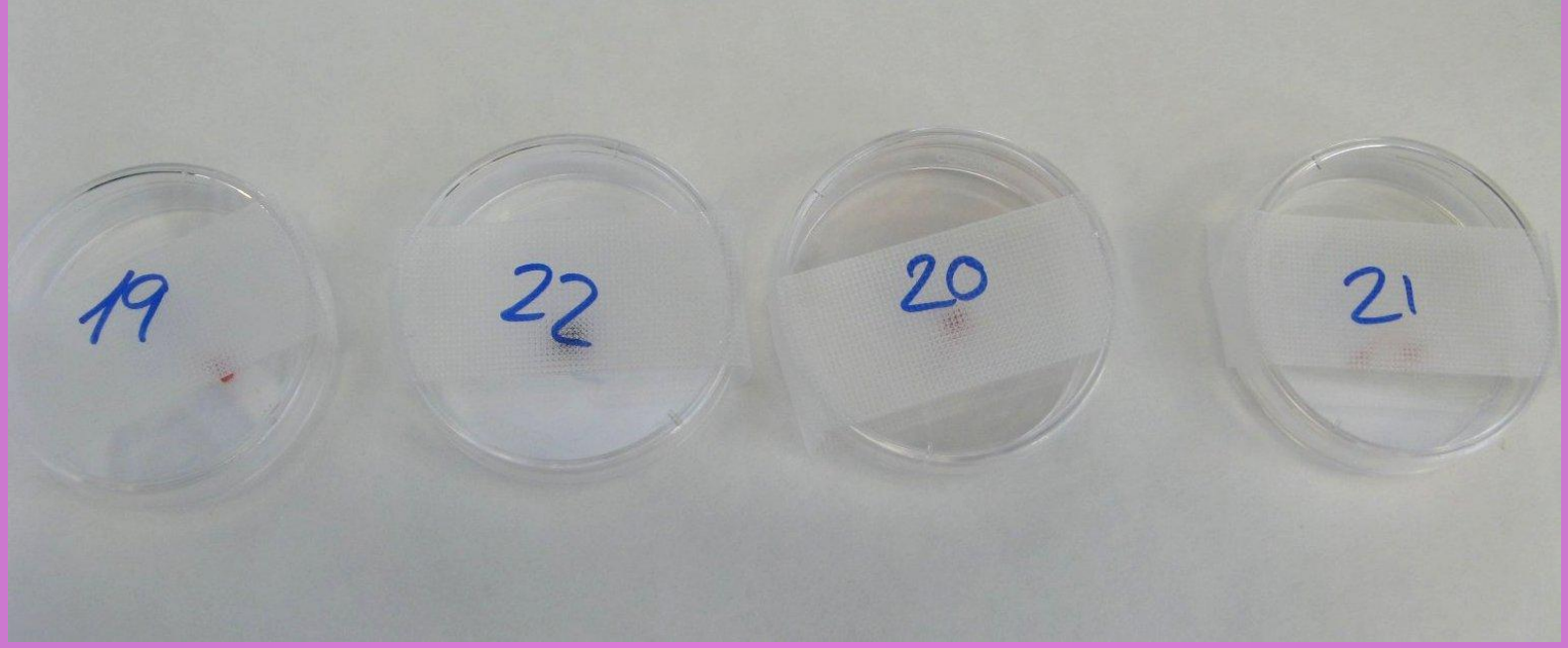
Mohs FE: *Chemosurgery for skin cancer: Fixed-tissue and fresh-tissue technique.* Arch Dermatol 1976; 112: 211-215

Ventajas

- Significativa reducción de las tasas de recidiva
- Conservación del máximo posible tejido sano perilesional
- Cirugía de bajo riesgo generalmente ambulatoria y con anestesia local
- Aplicable a tumores de gran extensión, y con invasión de distintas estructuras anatómicas

Inconvenientes

- Habitualmente necesarias múltiples secciones
- Método laborioso: marcaje (fotografía), orientación, microtomía, tinción, y estudio al microscopio.
- Tiempos muertos para el oculoplástico, con riesgo de infección de la herida, y repetición de las inyecciones anestésicas.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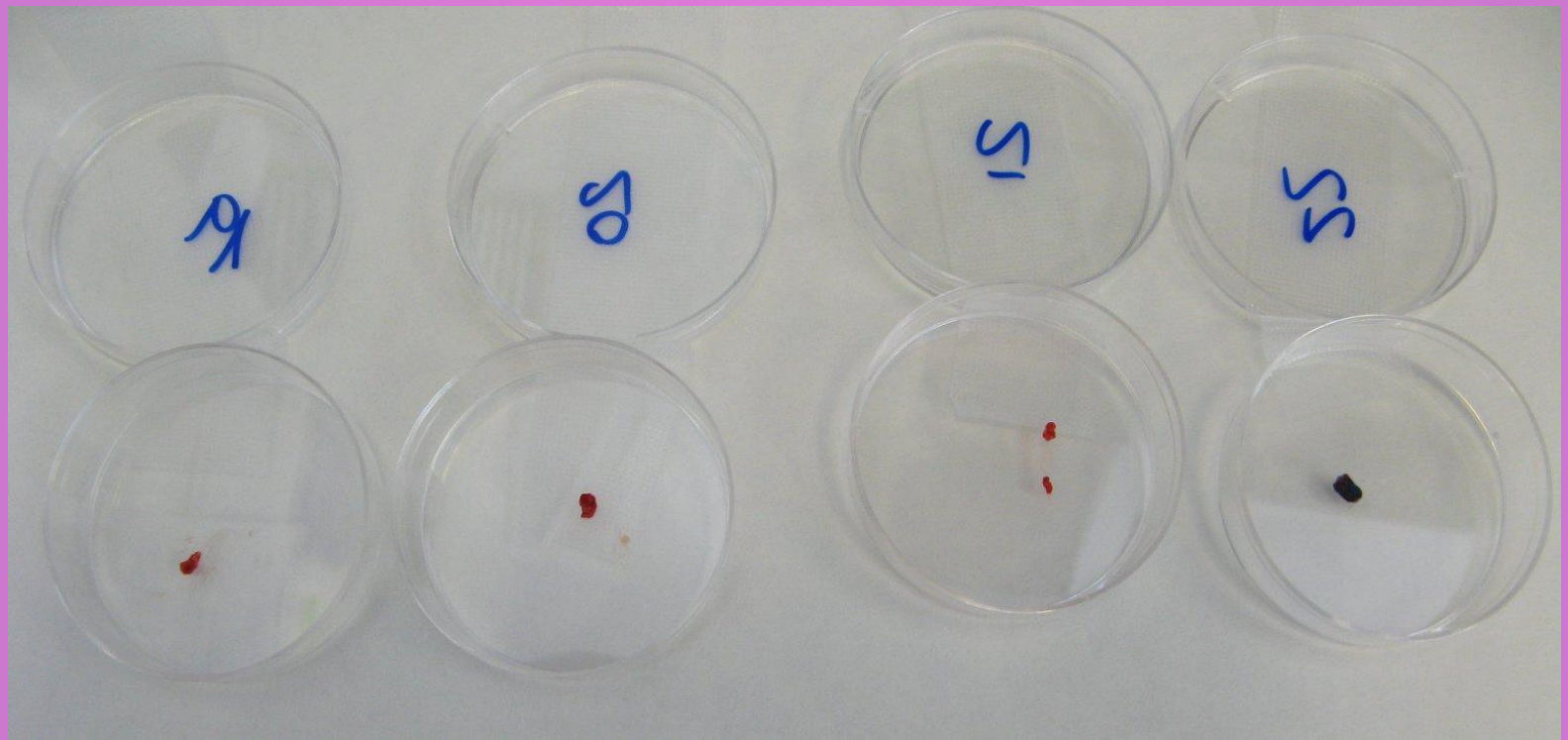
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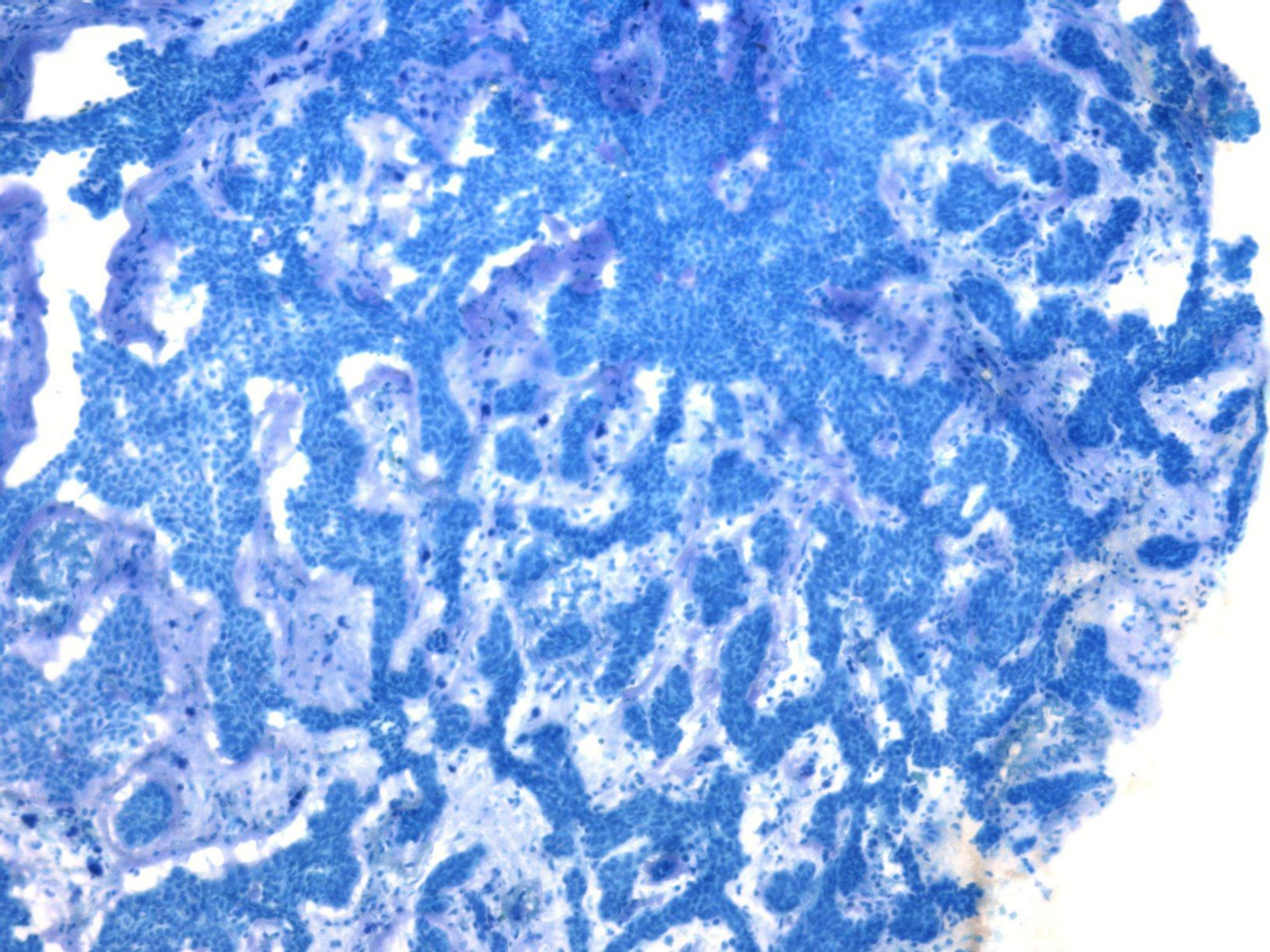
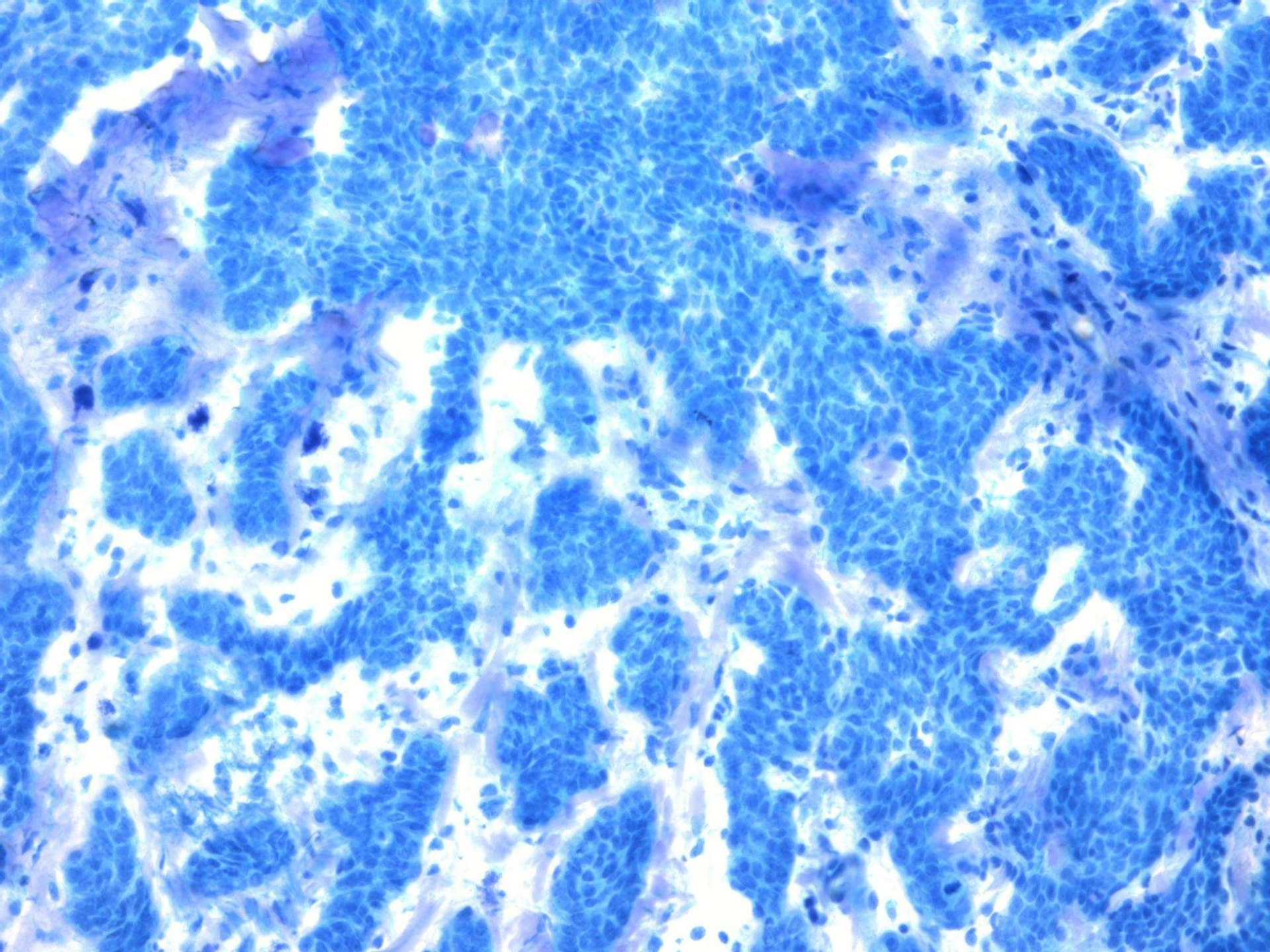
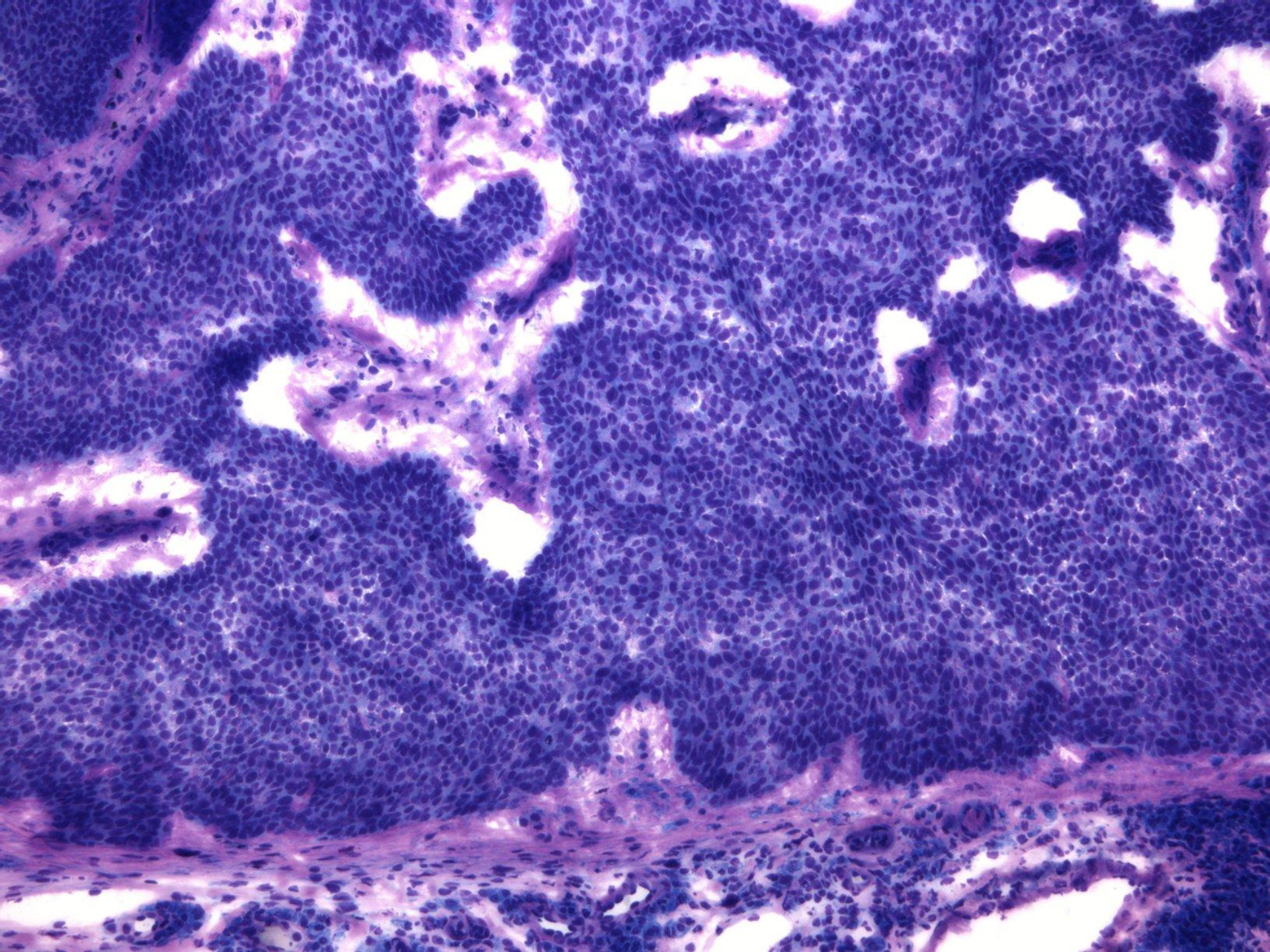
Tinción

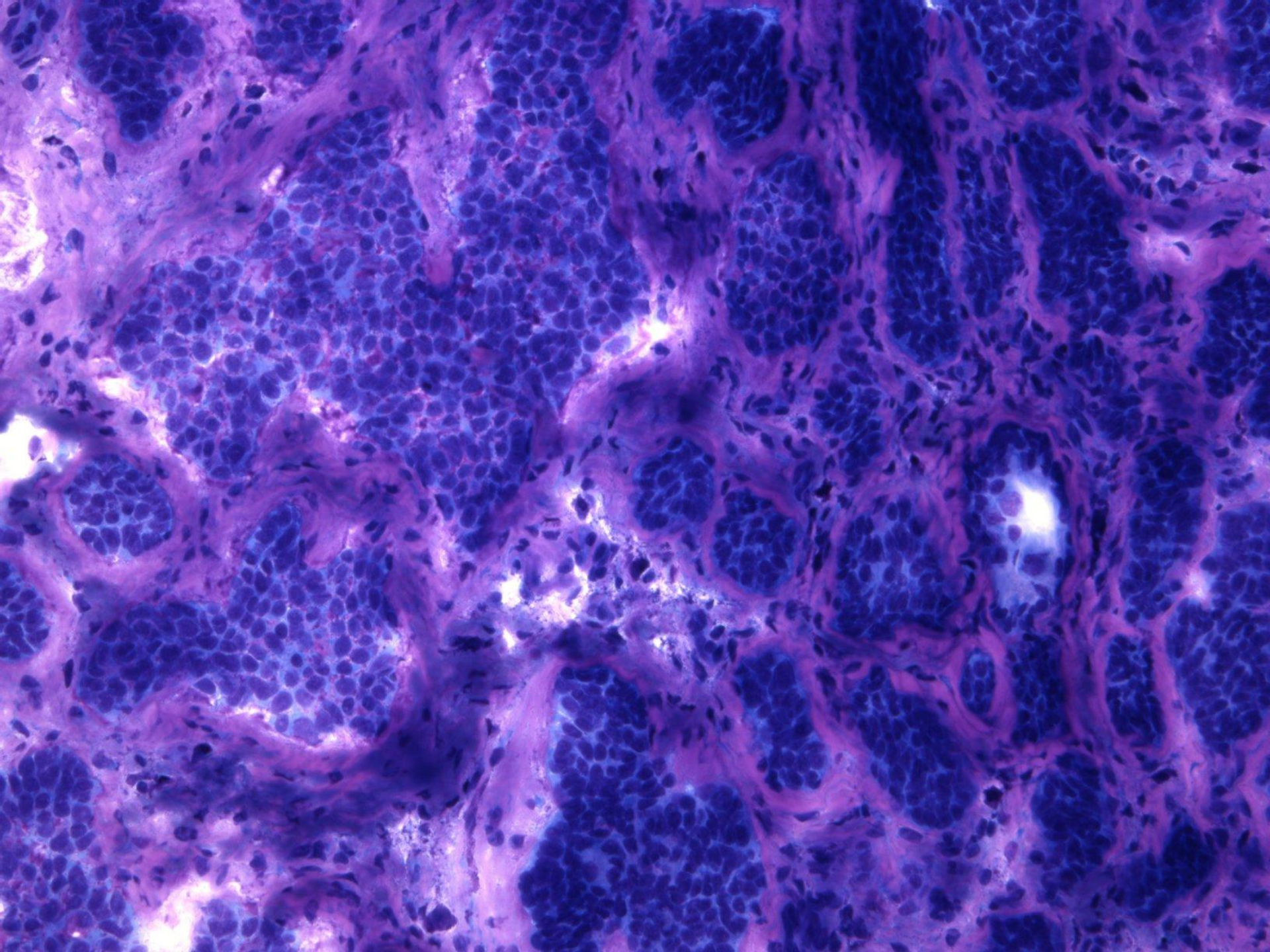
- H/E 2 minutos ?
- Diff-Quik 20 segundos
- **Azul de Metileno 2 segundos**

- Medio de inclusión (geles) – Agua
- Spray congelante ?
- Fijación: alcohol 95º + ácido acético al 1%
- Tinción: azul de toluidina
- Montaje: medio acuoso







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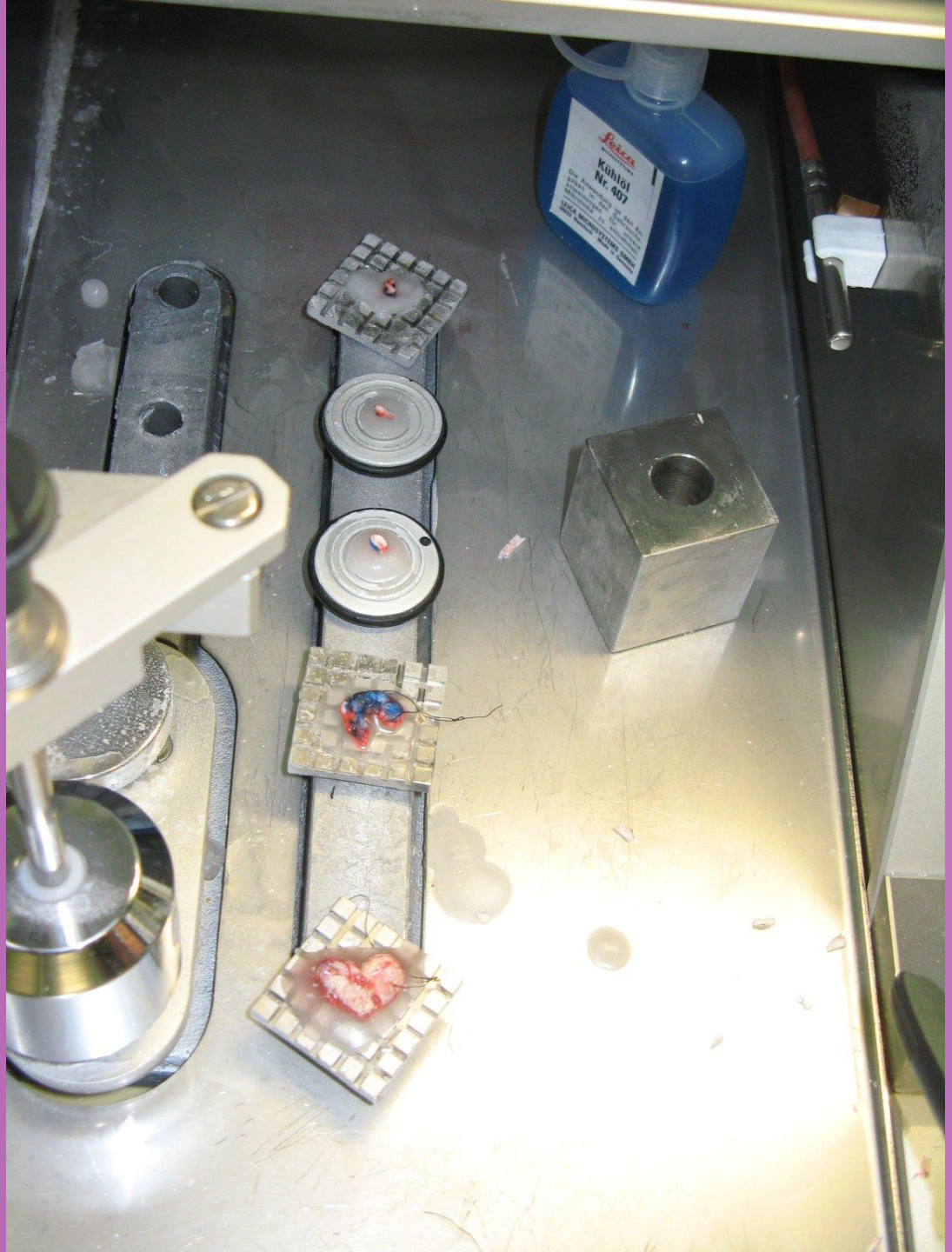
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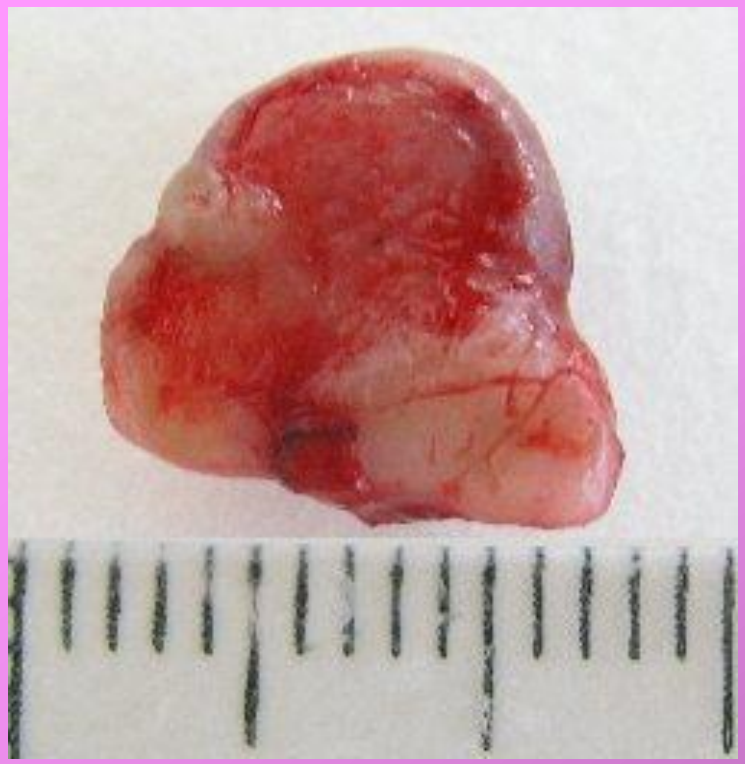

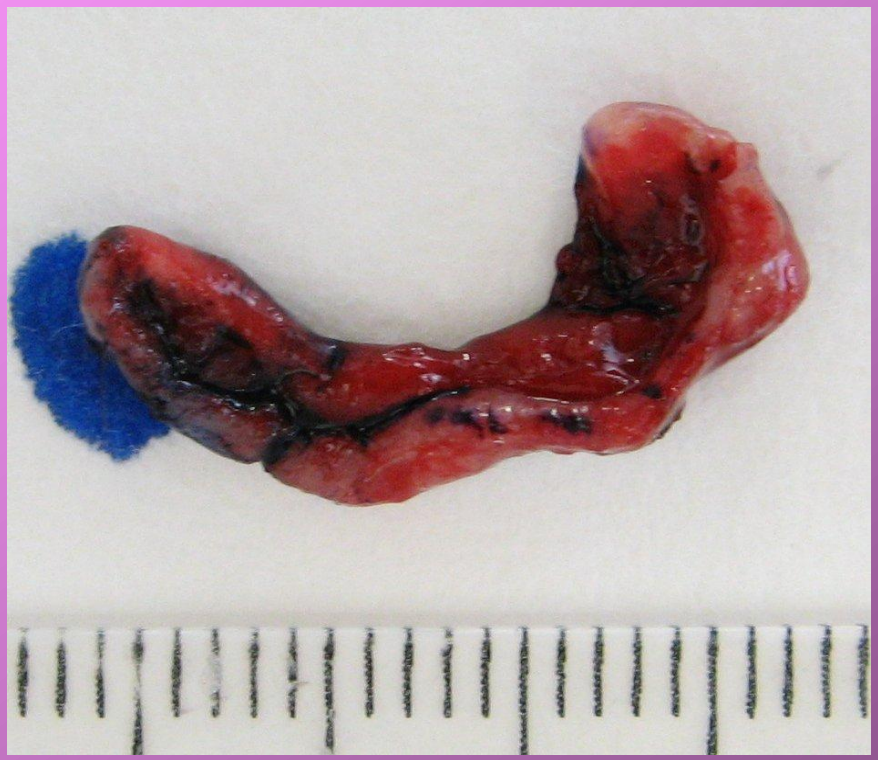

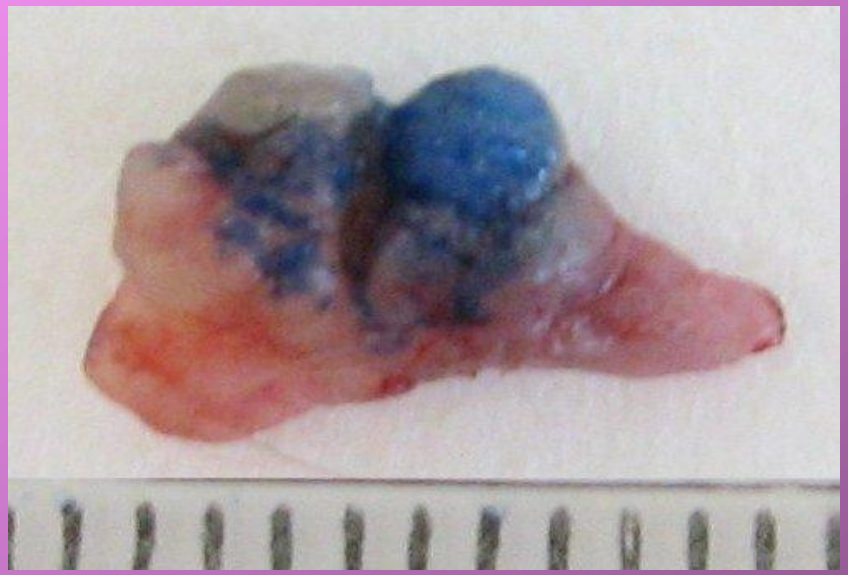

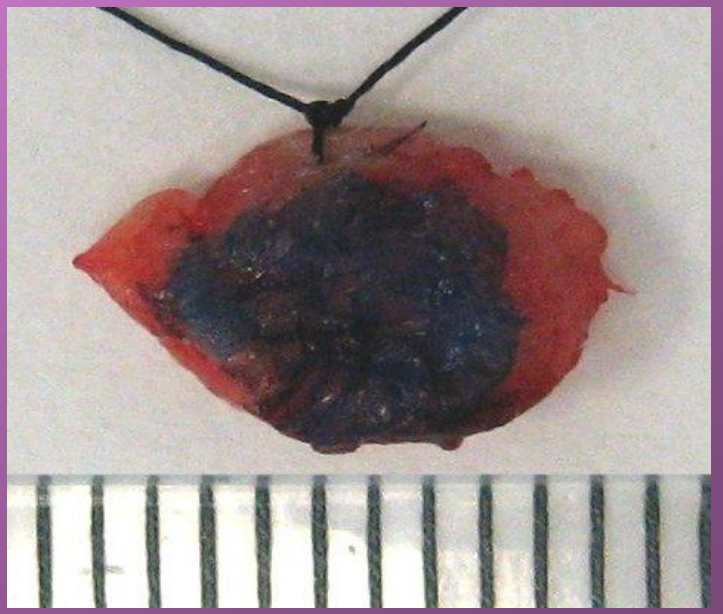

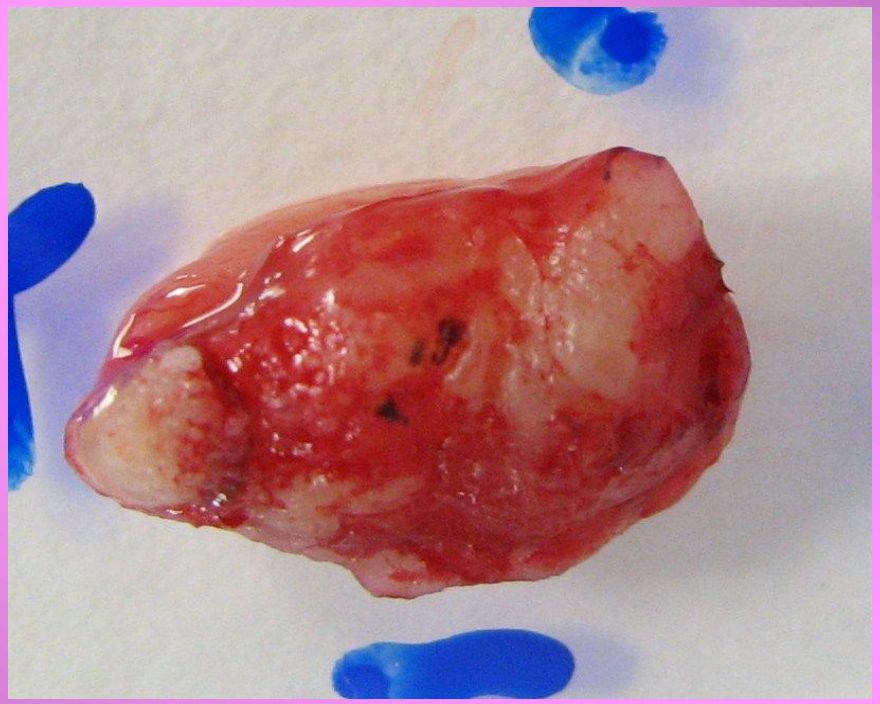

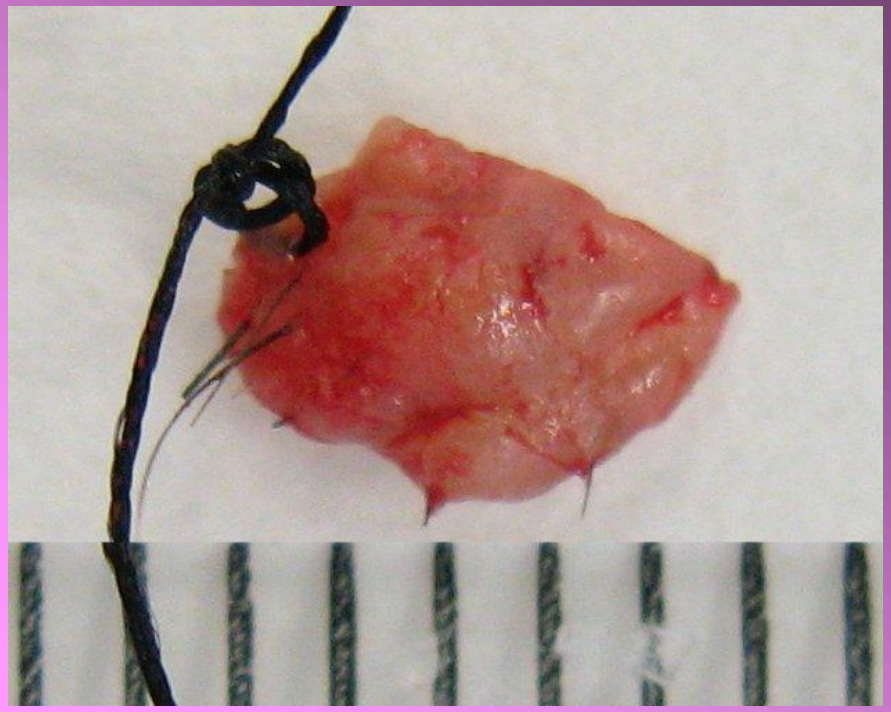

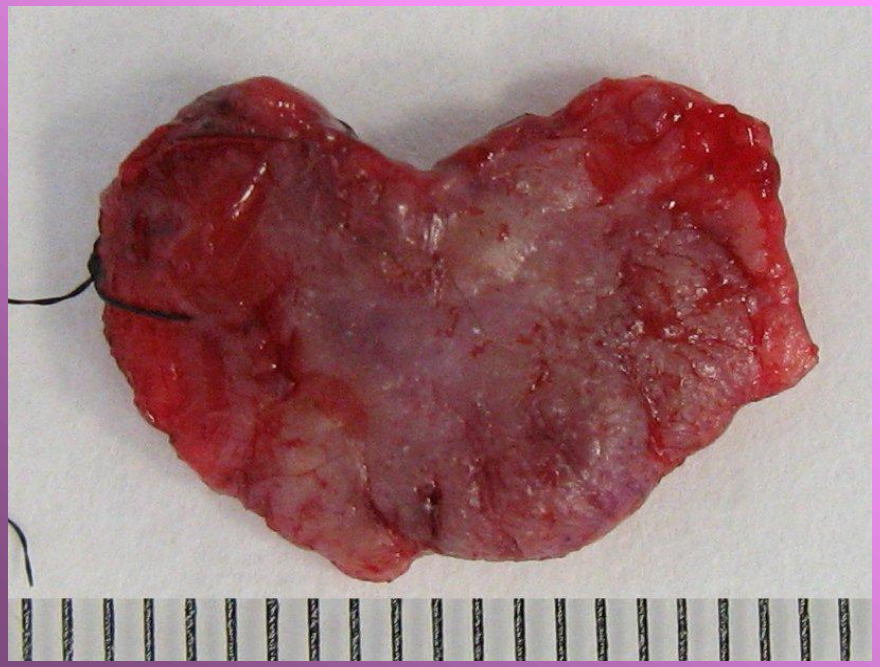

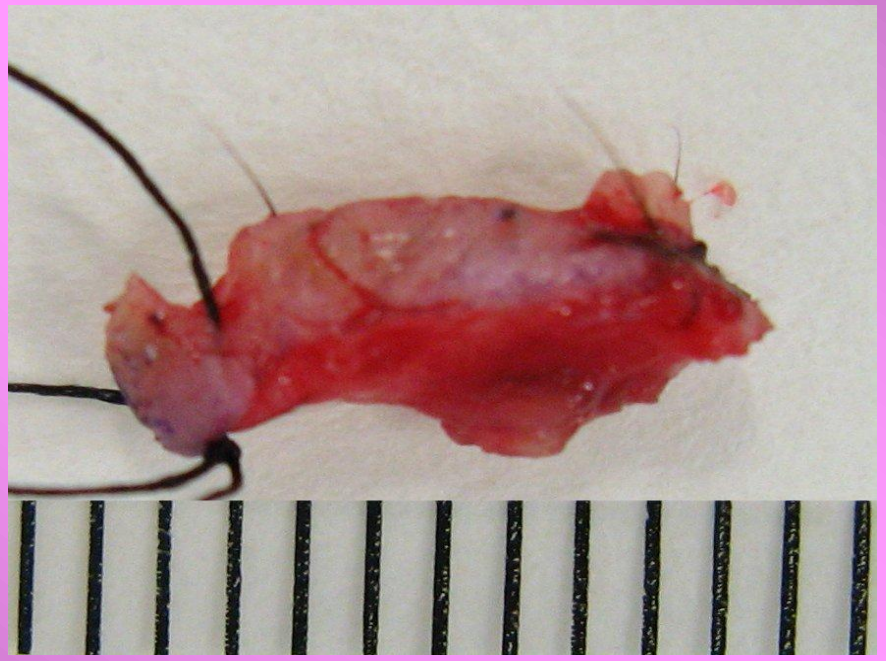

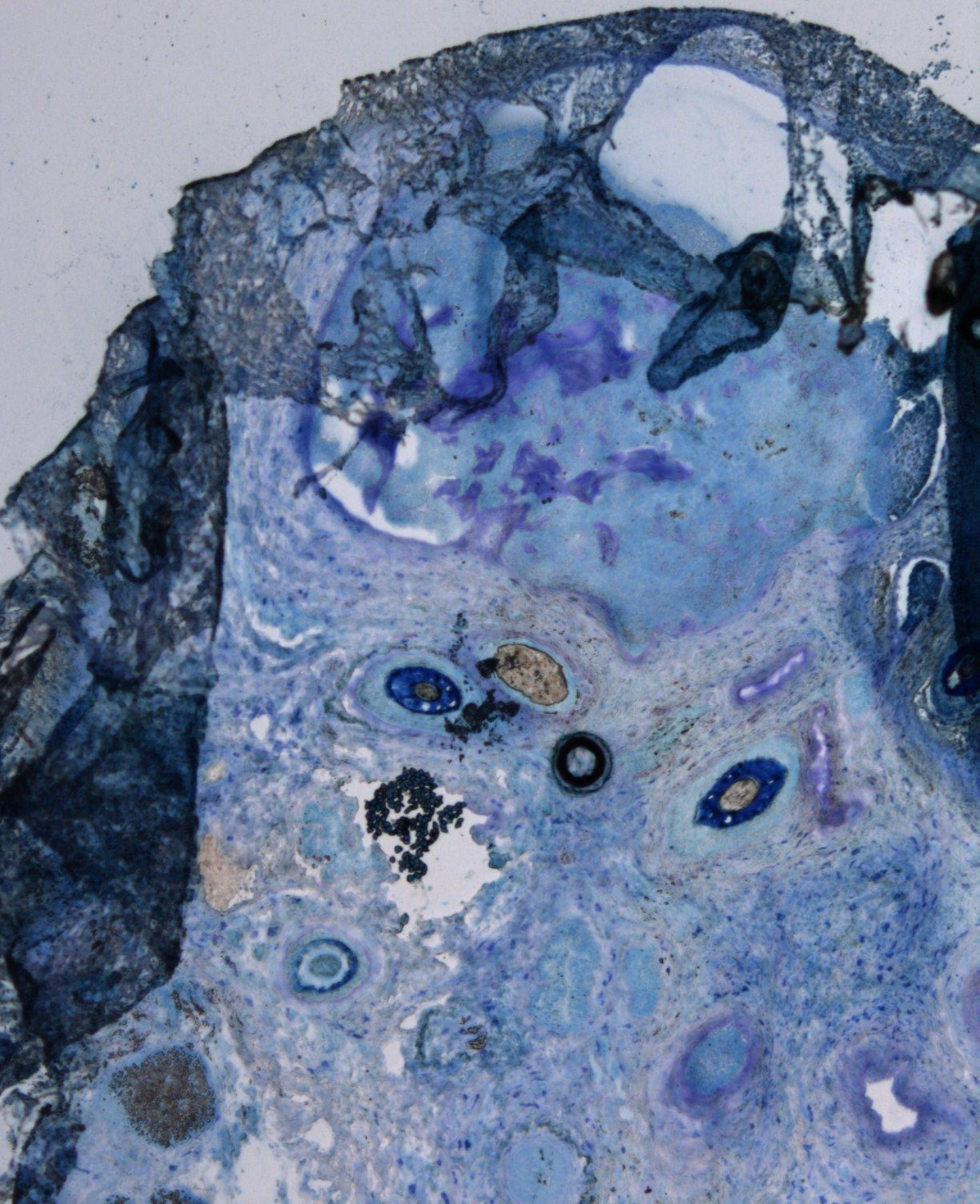

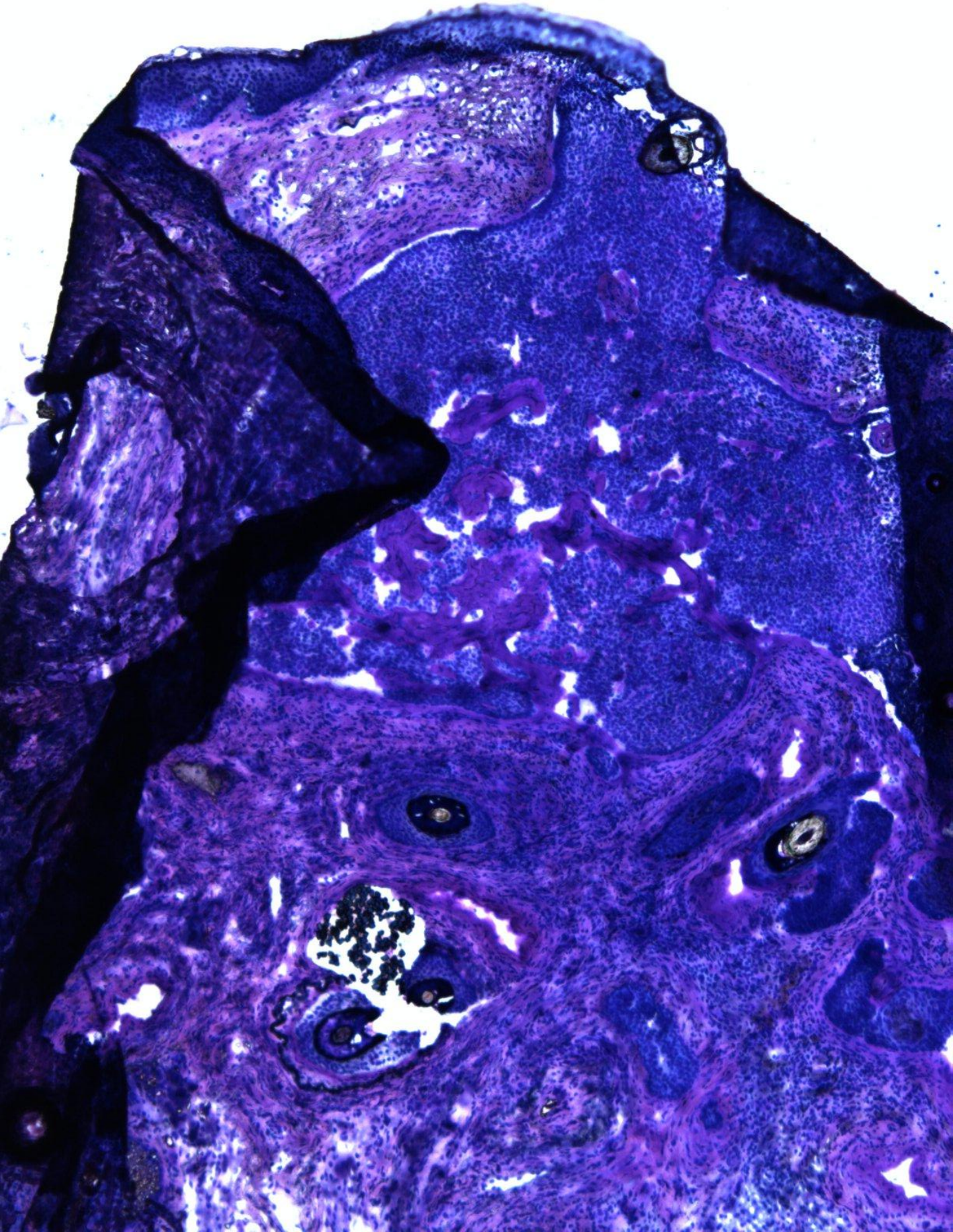

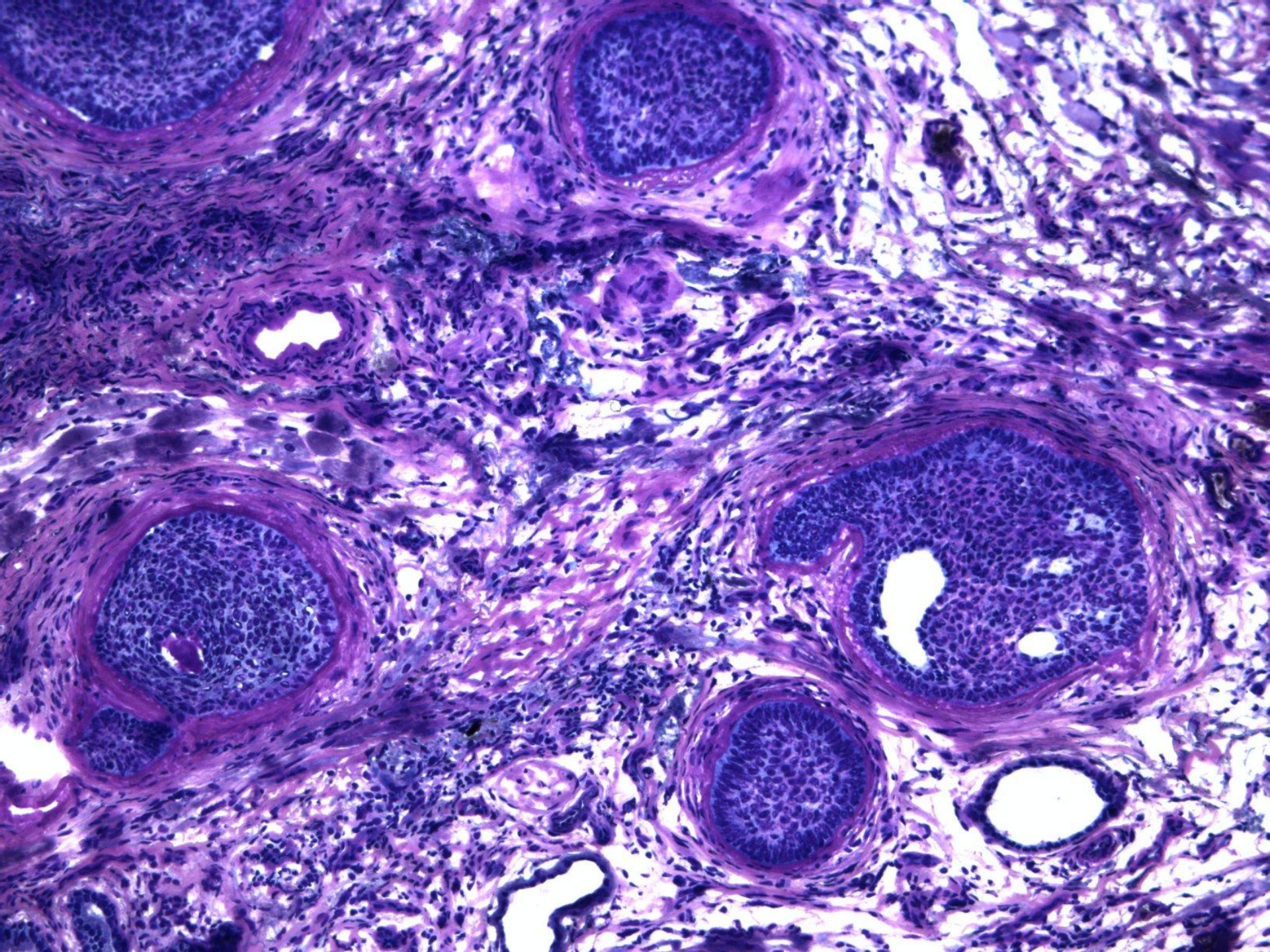

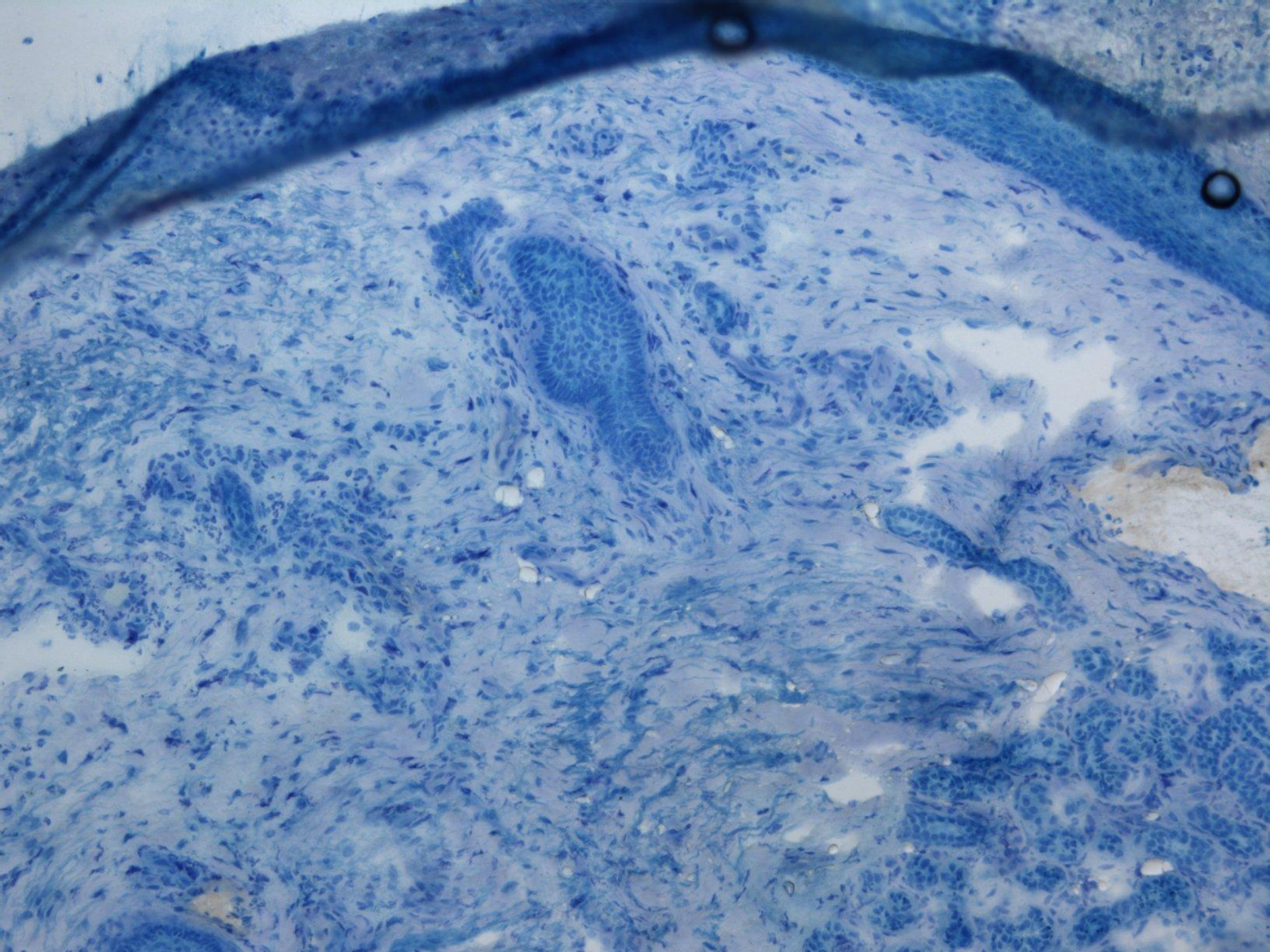

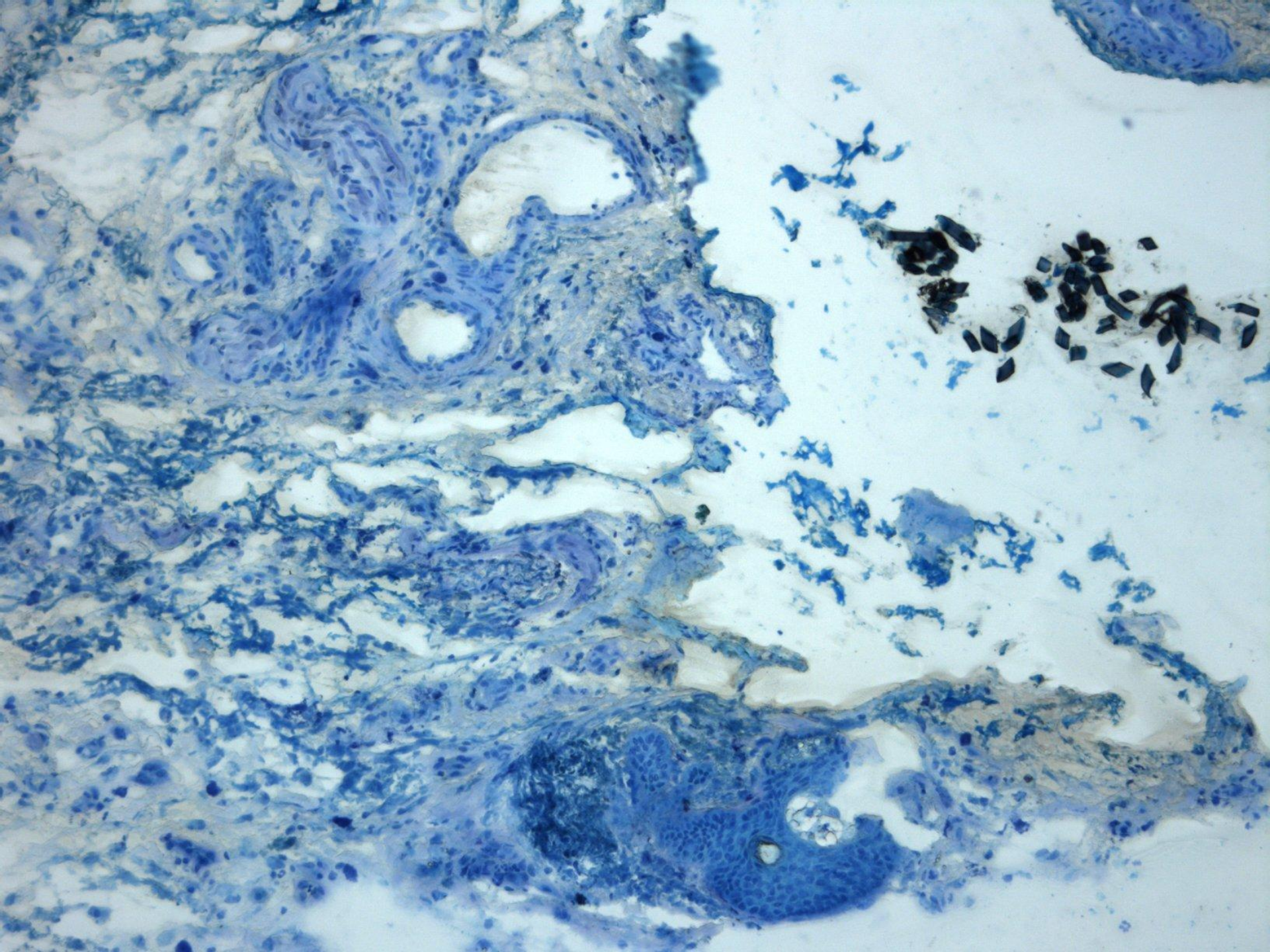

Fracasos de la Técnica de Mohs

- Extensión a distancia del tumor
  (c. basocelular)

  - Infiltración perineural
  - Infiltración de la adventicia vascular

Diversidad de los tumores periorbitarios