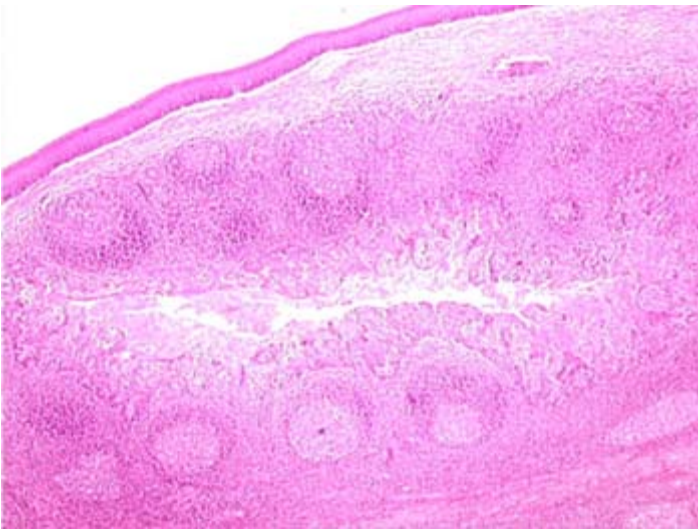


Lab 12.1 - Human palatine tonsil: lymphoid nodules

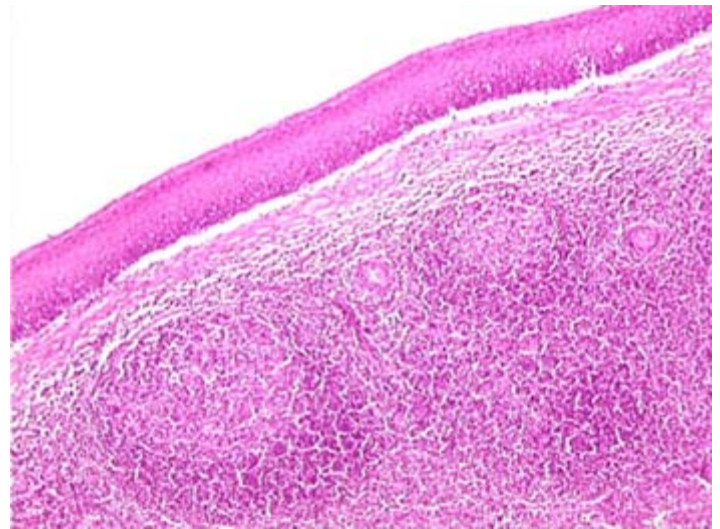
Use the following slide images to perform this lab at home following the instructions of your pre-lab. It is not required to print this out. Make sure to properly label and identify where indicated and to write up your conclusion referring to what you learned about the structures sketched and their functions. Please read the additional info provided.

READ: The lymphatic tissue of the tonsillar ring, which is located near the entrance of the throat and which consists of the palatine tonsil (commonly known as "the tonsil"), the pharyngeal tonsil (commonly known as "adenoids"), and the lingual tonsil (on the posterior surface of the tongue). These are un-encapsulated lymphatic tissue.

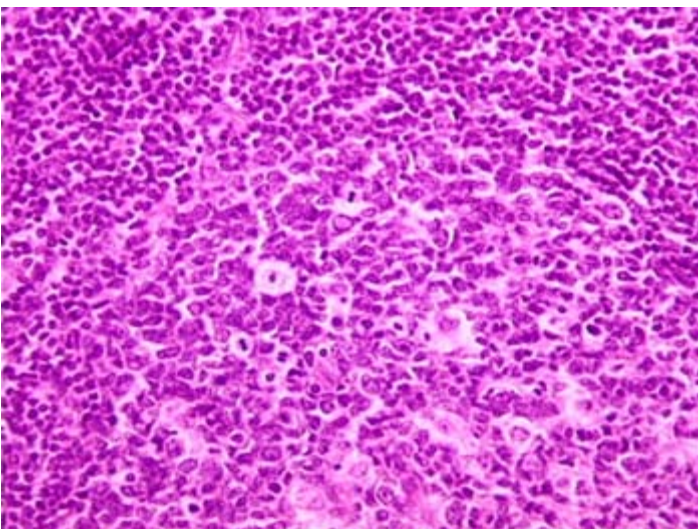
LARGER IMAGES ON FOLLOWING PAGES



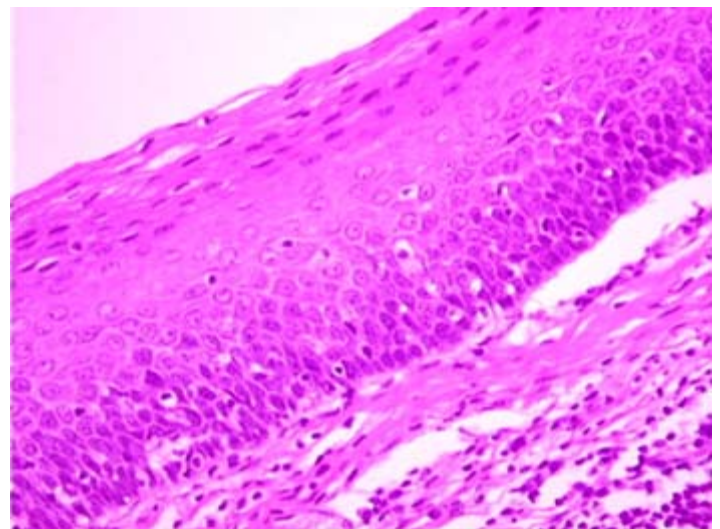
Sketch #1 - Slide - Palatine tonsil: Step 4, LABEL



Sketch #2 - Slide - Palatine tonsil: Step 7, LABEL
Sketch #4 - Slide, magnified - Palatine tonsil: Step 10

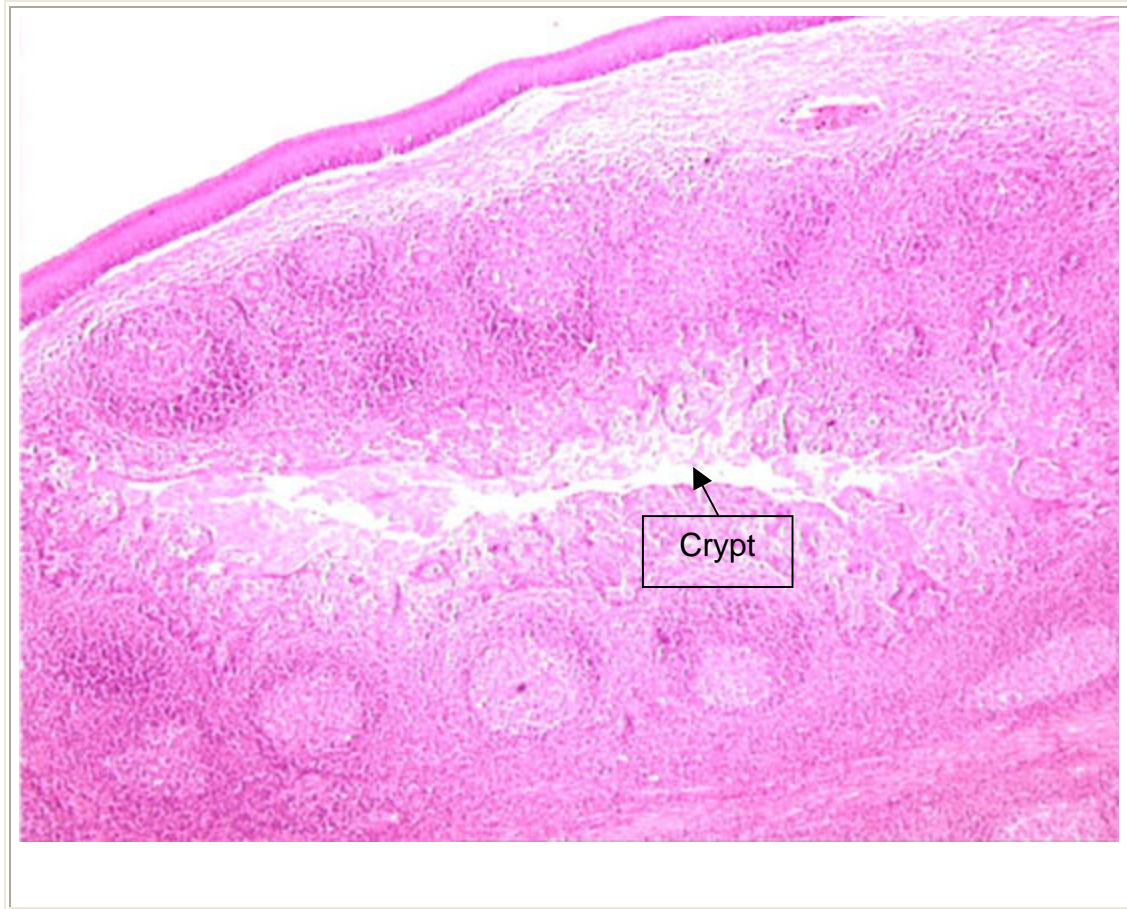


Sketch #3 - Slide - Palatine tonsil: Step 8



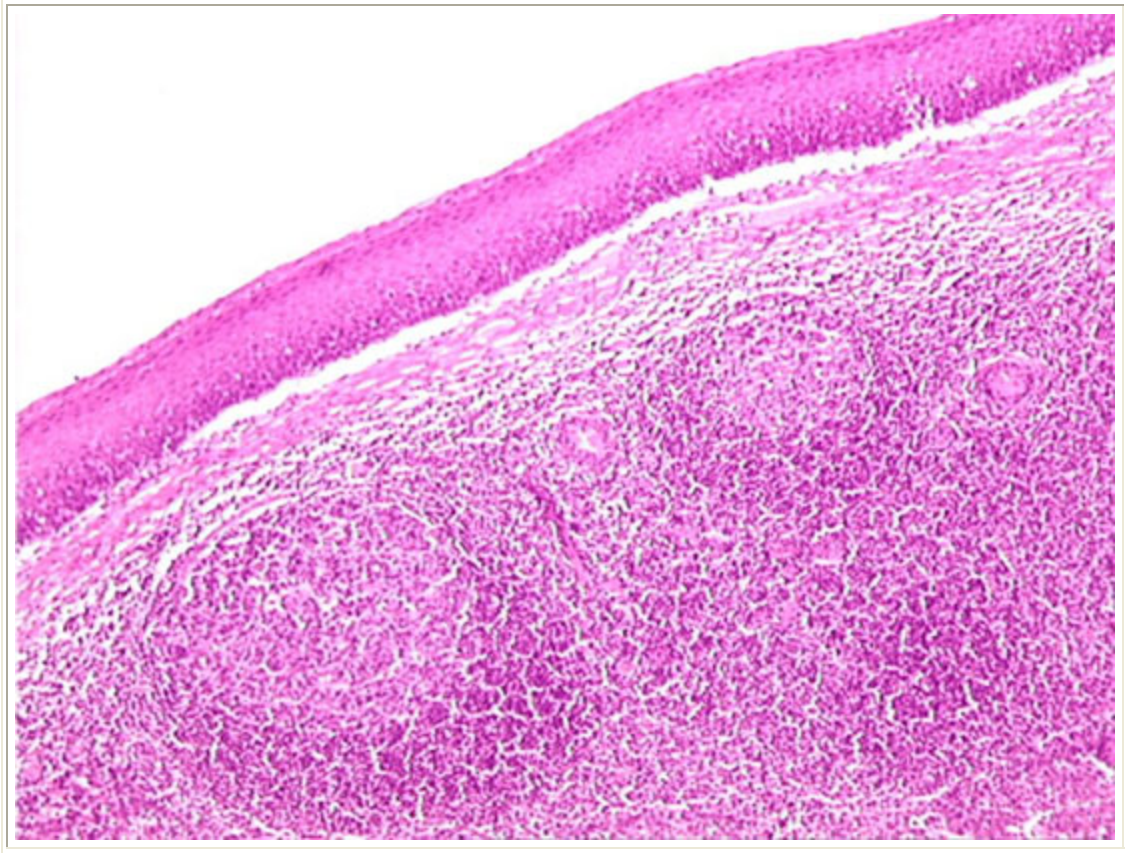
Determine type of Epithelial Cell and list it in data
Slide - Palatine tonsil: Step 13, ID

Sketch #1 - Slide - Palatine tonsil: Step 4, LABEL



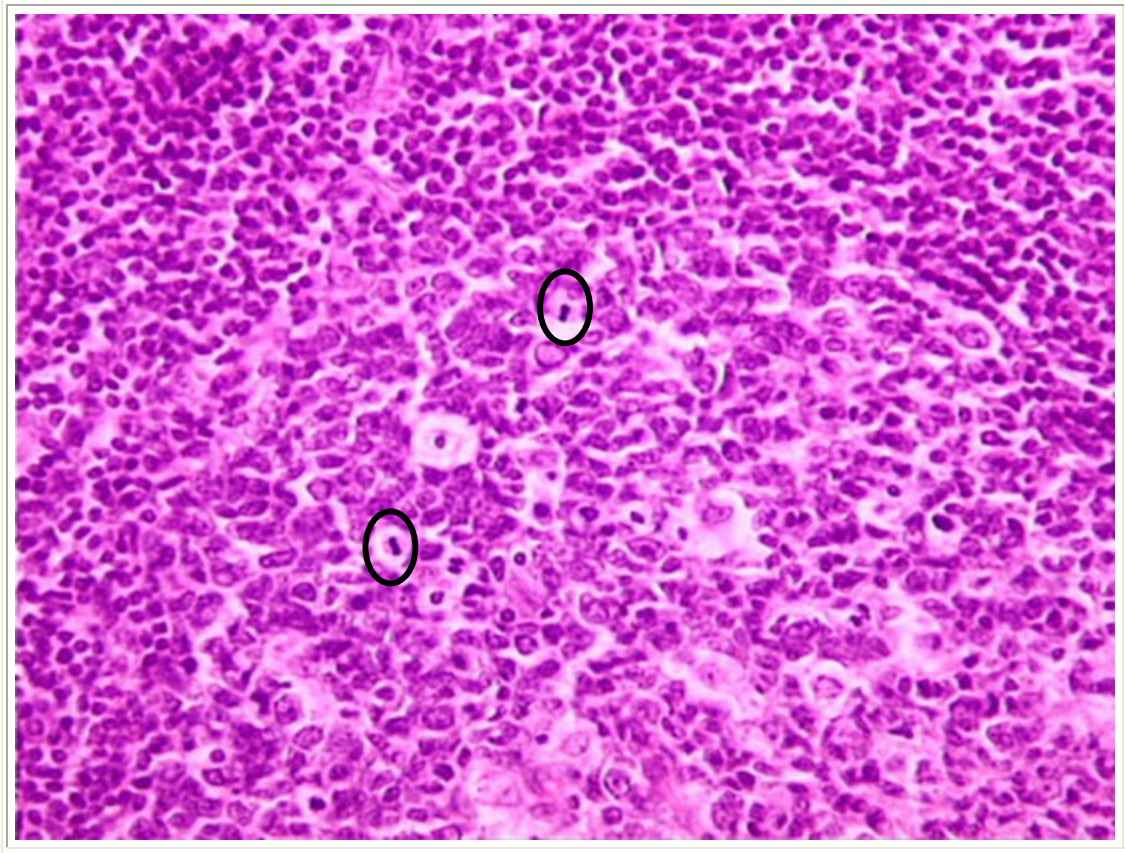
In this survey image of the palatine tonsil, a portion of the covering epithelium is evident at upper left. Note the circular profiles of lymphoid nodules, some with lighter-staining centers, situated below the epithelium. The lymphoid nodules surround a tonsillar crypt, a pale staining space containing some cellular debris.

Sketch #2 - Slide - Palatine tonsil: Step 7 - LABEL



With higher power, the surface epithelium and several subjacent lymphoid nodules are shown.

Sketch #3 - Slide - Palatine tonsil: Step 8



In this high-magnification view of the germinal center of a lymphoid nodule (*tissue inside the lymph nodule*), several mitotic figures (*circled*) showing the metaphase plate are visible in the center of the image.

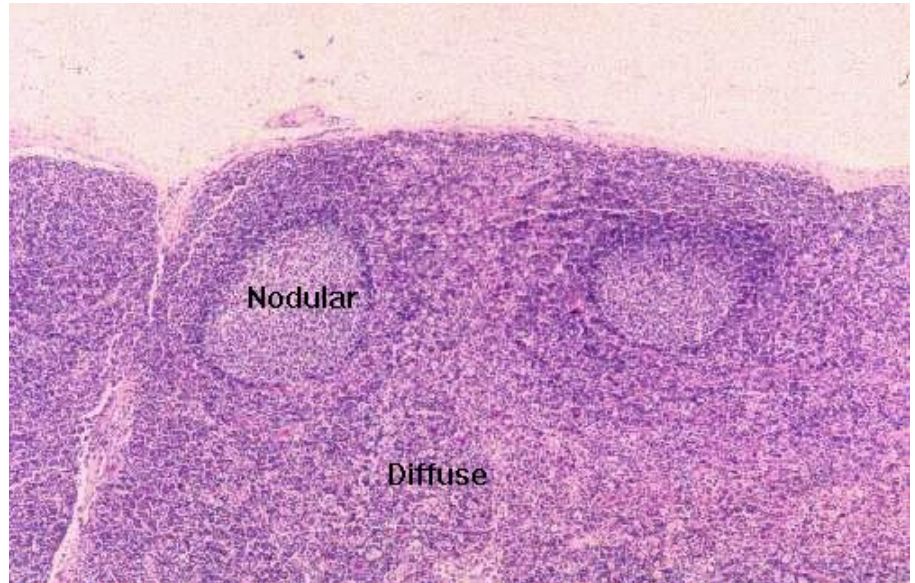
Sketch #4 – Slide Enlarged - Palatine tonsil: Step 10

READ!!!

Here you see both diffuse and recognizable structures *inside a lymphatic organ* are "nodular" and the rest of it is "diffuse" lymphatic tissue. Nodular tissue *always* occurs within diffuse tissue.

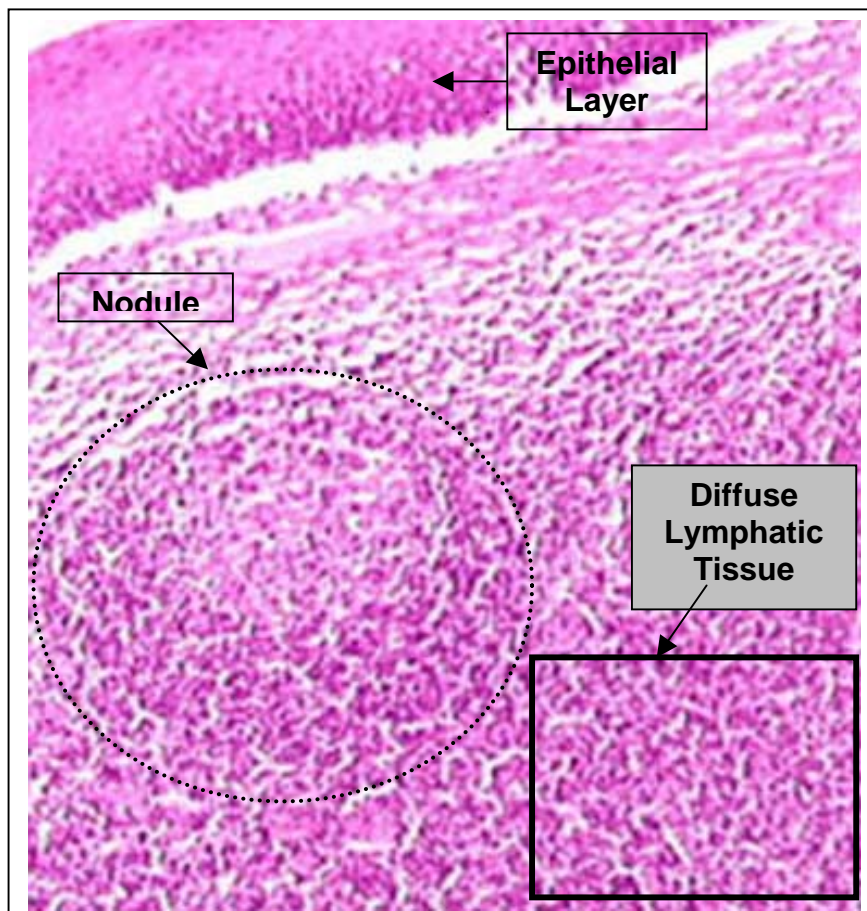
Diffuse lymphatic tissue can be found outside of lymphatic system organs. For example, the aggregation of lymphocytes in a gland in response to invasion by bacteria is legitimately considered diffuse lymphatic tissue. In these cases nodular tissue would not be found in it.

nodular tissue. Lymphatic regions organized into



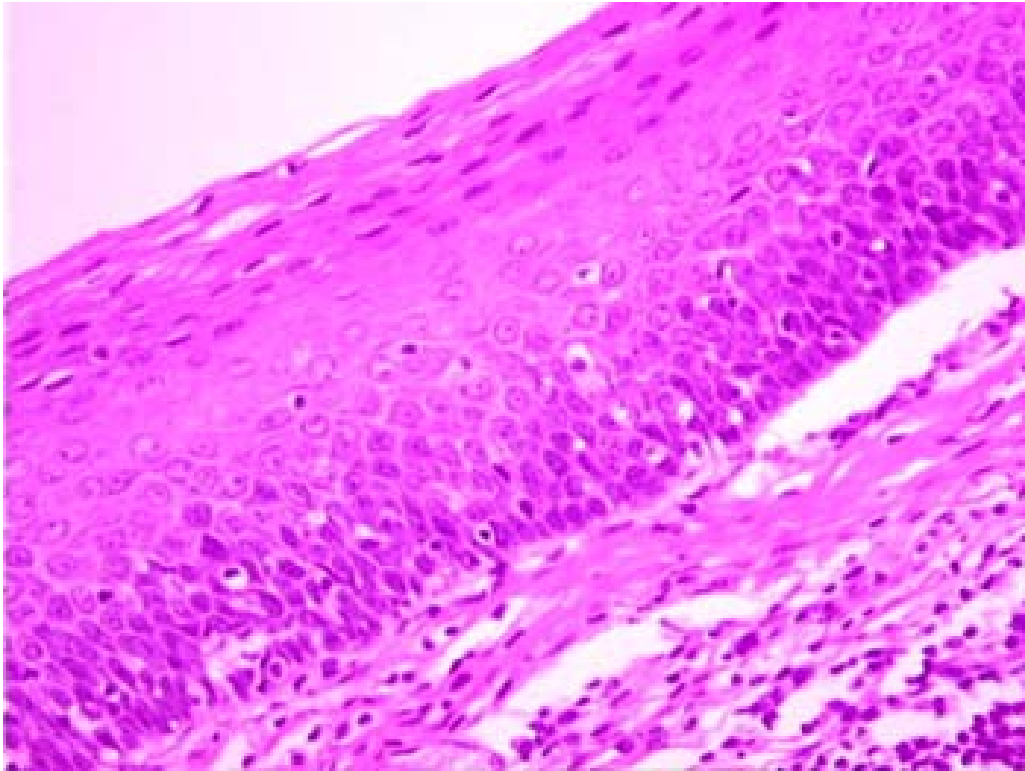
Don't confuse "nodular

lymphatic tissue" with "lymph node." The latter term refers to a specific organ, inside of which **both** diffuse and nodular tissue may be found, however, nodular lymphatic tissue can be found in places other than lymph nodes.



Use this section of the slide to sketch the diffuse lymphatic tissue.

Determine type of Epithelial Cell and list it in data
Slide - Palatine tonsil: Step 13 - ID



Use your reference cards or text to determine the type of epithelial tissue, and then list the answer in your data.

If you cannot figure it out what type of epithelial tissue this is, you can find the answer at [Human Tonsil Slide - Epithelial Tissue](#).