Figures 1-a and 1-b show a routine chest roentgenogram of a 40-year-old woman. The patient is asymptomatic, and the results of a physical examination are normal.

The most likely diagnosis is:

A. Neurogenic tumor.

The most common tumor in the posterior mediastinum is one of neurogenic origin.

This group includes neurofibroma, neurilemoma, and neurogenic sarcoma. These tumors are sharply defined, round or oval, and of homogenous density.

They occur most commonly in young adults, usually are asymptomatic, and are discovered on a screening chest roentgenogram.
Enteric cysts are very rare but may be found in the posterior mediastinum usually located within or adjacent to the wall of the esophagus.

Bronchogenic cysts may be seen in the lung or mediastinum and may be single or multiple. When found in the mediastinum, they are usually near carina.

The most common endocrine tumor of the mediastinum is a nodular goiter that is located in the anterior compartment.

Lymph node enlargement is the most common mediastinal tumor, and these are found predominantly in the mid mediastinum.