

Meeting abstract

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## The diagnostic utility of immunohistochemical and electronic microscopy in distinguishing between pleural mesothelioma and adenocarcinoma

Carlos González Carrillo C<sup>1</sup>, Hugo Dominguez Malagón\*<sup>1</sup> and Oscar Arrieta<sup>2</sup>

Address: <sup>1</sup>Department of pathology, National Cancer Institute, Mexico City, Mexico and <sup>2</sup>Medical Oncology Department, Instituto Nacional de Cancerología, Mexico City, Mexico

Email: Hugo Dominguez Malagón\* - hdominguezm@terra.com.mx

\* Corresponding author

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### Background

The mesothelioma is a mesodermic tumor localized in the pleura in 70–90% of the cases, with an incidence of 2 × 100,000 habitants per year in women and 10–30 × 100,000 habitants per year in men. The diagnosis is realized by cytology, guided biopsy by computed tomography and electronic microscopy which is the gold standard where we can observe several nodes in the visceral and parietal pleura where are produced effusion pleural. The objective of this trial was to realize the immunohistochemical and structural study of the effusion pleural in patients with lung tumors in which we suspect the presence of mesothelioma versus adenocarcinoma to show is an adequate diagnosis method.

### Materials and methods

The material utilized in this trial was obtained in the cytopathology and pathology department of the respiratory disease institute. We studied thirty effusion pleural fluids of ten patients with the diagnosis of mesothelioma and ten patients with the diagnosis of adenocarcinoma during the period between August and November. We realized the determination of calretinina and keratin (CK) and the ultrastructural study with the electronic microscopy.

### Results

The patients with mesothelioma diagnosis were calretinina positive which confirms the histological diagnosis. We observed in the electronic microscopy profusion of

microvilli in the surface cells. The adenocarcinoma fluids were CK positive and negative for the rest of the test.

### Conclusion

We demonstrate that we can distinguish between pleural mesothelioma and adenocarcinoma by immunohistochemical test and electronic microscopy, these diagnosis methods may be an option for patients in whom are contraindicated the biopsy realization, besides they may be cheaper and quicker than the biopsy.