ABSTRACT

COMPARISON OF NAPSIN A VERSUS THYROID TRANSCRIPTION FACTOR 1 IN THE TYPING OF LUNG CARCINOMA

INTRODUCTION:

Lung cancer is the leading cause of cancer mortality in the world. With the development of new, successful treatments for adenocarcinoma, it is essential to diagnose the type of Non Small Cell Lung Carcinoma whenever possible. Thyroid Transcription Factor-1 is a favoured marker for lung adenocarcinoma but has limited sensitivity and specificity. Napsin A is a functional aspartic proteinase that may be an alternative marker for primary lung adenocarcinoma.

AIM:

To study the expression of napsin A in lung cancer tissues and to compare TTF-1, which has already recognized as a useful marker for lung adenocarcinoma and to correlate with clinical parameters.

METHODOLOGY:

This is a retrospective and prospective study. By analysing the histopathology records in the Institute of pathology, Rajiv Gandhi Government General Hospital, Chennai, during the period of 2015 - 2017, histopathological

slides of biopsy proven 50 malignant lung cases were collected. Napsin A expression was tested and compared with TTF1.

RESULTS:

Adenocarcinoma is the commonest type. Most common age group is 51-60 years with male female ratio is 2.3:1. Smokers have increased risk for malignancy. Napsin A is as sensitive as ttf1 & more specific than TTF1 in the subtyping of lung adenocarcinoma**.** Napsin A is as sensitive as ttf1 & less specific than TTF1 in the subtyping of lung squamous cell carcinoma. Napsin a is as specific as ttf1 & more sensitive than TTF1 in the subtyping of lung small cell carcinoma.

CONCLUSION:

Napsin A is almost limited to adenocarcinoma, while TTF-1 is not so specific. Although TTF-1 is expressed in majority of adenocarcinomas, its expression is also noted in large proportion of small-cell lung carcinomas. Hence Napsin A can be used as an exclusionary marker for small cell carcinoma.

KEY WORDS:

Lung cancer, Napsin A, Small biopsy, Thyroid transcription factor 1,