

LAMININ CHANGES IN EPITHELIAL OVARIAN TUMORS

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿ قَالَ رَبِّ اشْرَحْ لِي صَدْرِي
وَيَسِّرْ لِي أَمْرِي وَاجْلِلْ عُقْدَةَ مِنْ
لِسَانِي يَفْقَهُوا قَوْلِي ﴾

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List of Abbreviations

B.M.	:	Basement membrane
FIGO	:	International federation of gynecology and obstetric
PAS	:	Periodic acid Schiff
WHO	:	World health org anization

Introduction

INTRODUCTION

The surface epithelial - stromal ovarian tumors are subgrouped into benign, atypically proliferating ("borderline", "of low malignant potential") and malignant categories, the intermediate group of atypically proliferating tumors are defined as exhibiting greater cellular proliferation than that encountered in the benign form of the same type of tumor, but showing no destructive invasion of the stromal component (*Scully RE 1979*).

The original reason for delineating the so called border line or low malignant potential group of ovarian epithelial tumors was to explain the remarkably good prognosis in women with serous ovarian tumors showing pathological features suggesting malignancy (*Taylor HC Jr, 1959*).

The basement membrane forms a continuous sheet that demarcates the epithelial from the stromal compartments, and this is essential for the normal organization and differentiation of tissues. Penetration of the basement membrane has to occur before an epithelial neoplasm can be described as invasive (*Liotta, 1984*). Several glycoprotein have been identified which seem to be found almost exclusively in the basement membrane, these include type IV collagen, heparan sulphate, proteoglycan and laminin (*Abrahamson, 1986*). This allowed accurate and Specific immunohistochemical techniques for basement membrane localization to be developed and even very small (10 nm) breaks in the basement membrane can be visualized (*Laurie et al., 1982*).

Laminin is a large non-collagenous glycoprotein component of the extracellular matrix. It is present in all basement membrane zones (*Foidart et al., 1980*). Laminin is a multifactorial protein influencing complex biological process like cell adhesion, basal cell differentiation and participates in controlling the selective permeability of basement membrane to macromolecules (*Abrahamson, 1986*). The immunohistochemical demonstration of laminin, may be of value in diagnostic pathology.