A STUDY ON MUCIN HISTOCHEMISTRY AND p63 EXPRESSION IN BENIGN AND MALIGNANT PROSTATIC LESIONS.

ABSTARCT

INTRODUCTION:

The diagnosis of limited well differentiated adenocarcinomas of prostate is one of most difficult areas of surgical pathology. Benign hyperplasia can sometimes mimic adenocarcinomas.

Numerous reports have claimed that acidic mucin is absent in benign prostatic glands and is present in prostatic adenocarcinomas.

Prostatic adenocarcinomas are differentiated from benign hyperplasia of prostate by absence of basal cell layer. Therefore basal cell marker (p63) is useful in differentiating benign hyperplasia of prostate from prostatic adenocarcinoma.

AIMS AND OBJECTIVES:

- To study the mucin histochemistry in benign and malignant prostatic lesions.
- To correlate with P63 expression in benign and malignant prostatic lesions.

MATERIALS AND METHODS:

Blocks of histopathologically proven benign prostatic hyperplasia and invasive prostatic carcinoma are taken up for staining with alcian blue at pH 2.5 to demonstrate the mucin character and also with p63 to identify basal cell layer/myoepithelial cells.

RESULTS:

In my study, 48% of adenocarcinoma cases showed Alcian blue positivity. Positivity was seen both intracellularly and intraluminally in malignant glands. Among Adenocarcinomas, well differentiated and intermediate grade showed 100% positivity, moderate to poorly differentiated adenocarcinomas showed 56.25% and

25% of high grade adenocarcinomas. All benign prostatic hyperplasia cases were negative for Alcian blue staining.

CONCLUSION:

In addition to histomorphology, Alcian blue staining can be used as an adjunctive in differentiating benign prostatic hyperplasia from well differentiated prostatic adenocarcinoma.

KEY WORDS:

Mucin histochemistry, Alcian blue, prostatic adenocarcinoma, benign prostatic hyperplasia, p63 in prostate.