

**APOPTOSIS INDEX, EXPRESSION p53, Bcl-2, AND ANGIOGENESIS IN RECCURENCE ENDOMETRIAL HYPERPLASIA PATIENTS**

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Endometrial carcinoma is the most common cause of death among all gynecologic malignancies. It is generally accepted that endometrial hyperplasia represents precursor lesions for endometrial carcinoma. The aim of this study was to investigate the correlation between clinical findings with apoptosis, expression of p53 and Bcl-2 in recurrence endometrial hyperplasia patients.

The study was conducted in Dr. Kariadi General Hospital Semarang. Research subjects were 22 patients with recurrence endometrial hyperplasia. Endometrial tissue samples were collected by hysteroscopy. Clinical findings were categorized based on the present (+) or absence (-) of Cork and Screw (CS) vascularisation appearance on endometrial tissue during hysteroscopy. Apoptosis index was evaluated by Tunnel assay method. Expression of p53 and BCL-2 were examined by immunohistochemical methods. Apoptosis, p53 and Bcl-2 expressions on CS (+) was significantly higher than CS (-) group ( $p < 0,05$ ). CS appearance was significantly associated with the present of *in situ* endometrial carcinoma ( $p < 0,05$ ). Hysteroscopy clinical findings was significantly correlated with apoptosis index ( $p < 0,001$ ) and p53 expression ( $p = 0,01$ ), however, not correlated with Bcl-2 expression ( $p = 0,6$ ). Clinical findings of recurrence endometrial hyperplasia were associated with the apoptosis and p53 expression.

**Keywords:** *Endometrium, hyperplasia, apoptosis, p53, Bcl-2*