

**TITLE: Type of endometrial carcinoma in patients with lynch syndrome and survival.**

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**RESEARCH PROJECT DESCRIPTION :**

Endometrial cancer is the most common gynecologic cancer. It is estimated 61,380 new cases and 10,920 deaths in 2017(1). ACOG and SGO recommends universal screening for lynch syndrome in patients with endometrial or colon cancer (2). Lynch syndrome is an autosomal dominant inherited cancer susceptibility syndrome caused by defects in the mismatch repair system. Hallmark of the lynch syndrome is colon cancer and endometrial cancer. The dualistic classification of endometrial cancers is type I (hormone receptor expression positive: Endometrioid type, good prognosis) and Type II (hormone receptor expression negative: Serous, clear cell carcinoma, poor prognosis) (3). It is controversial as to whether the mismatch repair associated to endometrial cancer is more likely to be associated with aggressive histologic subtypes (type II or non-endometrioid type) or prognosis. Kobel et al findings suggest that mixed endometrioid and clear cell carcinoma are associated with better disease-specific survival (4). Mills and Bartosch et al suggest that the majority of Lynch syndrome – associated endometrial carcinoma is endometrioid type (5, 6). Zakhour et al reported a poor response to progestin treatment in patient with endometrial hyperplasia or malignancy with lynch syndrome but 53% response in patients with no lynch syndrome (7). Chemoprevention with oral contraceptives and progesterone has been recommended, however hormones do not work for type 2 endometrial cancers. Our objective is to identify the type of endometrial carcinoma in patients with lynch syndrome and analysis its prognosis.

Type of study: retrospective. Chart Review.

Role of Medical student: Abstract data (Pathology and clinical data) from medical records from January 1997 to December 2016.

References:

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7. Zakhour M, Cohen JG, Gibson A, Walts AE, Karimian B, Baltayan A, Aoyama C, Garcia L, Dhaliwal SK, Elashoff D, Amneus M, Walsh C. Abnormal mismatch repair and other clinicopathologic predictors of poor response to progestin treatment in young women with endometrial complex atypical hyperplasia and well-differentiated endometrial adenocarcinoma: a consecutive case series. *BJOG*. 2017 Jan 27. doi: 10.1111/1471-0528.14491. [Epub ahead of print].