

Synchronous Primary Endometrial and Ovarian Cancers

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Synchronous primary cancers are relatively uncommon in general population. About 0.5-1.7% of women with gynecological malignancies have synchronous primary cancers of the female genital tract [1-5]. Synchronous primary endometrial and ovarian cancers are the most common combination [1,2,4].

The etiology and pathogenesis of synchronous primary cancers of the female genital tract, remains unclear [4,6]. The theory of the "secondary Müllerian system" has been proposed to explain the observation of multiple similar cancers in the female genital tract [6,7]. According to this theory, epithelia of the cervix, uterus, fallopian tubes, ovaries and peritoneal surfaces simultaneously respond to a carcinogenic stimulus [6,7]. Shared hormonal receptors (estrogen receptors) may be responsible for the development of multiple primary malignancies in predisposed tissue [3,4,8].

It is also possible that synchronous presence of these cancers is an indicator of an etiologically distinct condition [9]. Perhaps patients have a more fragile genome and prior genetic damage may predispose to synchronous cancers [9-13]. Thus, embryologic, hormonal or other phenomena may be associated with the development of malignancies arising simultaneously in genital tissues [3,4,6-9,11].

Patients with synchronous primary endometrial and ovarian cancers had distinct clinical characteristics including: young age, obesity, premenopausal status and nulliparity [14]. Usually, they are 10 - 20 years younger than their counterparts with endometrial or ovarian cancer [2,15-17]. The median age at diagnosis is 50 years [1,14,16-19].

The most common presenting symptoms and signs are: abnormal uterine bleeding (46%), abdominal/pelvic pain (17%) and abdominal/pelvic mass (13%) [14,16,19,20].

Synchronous primary endometrial and ovarian cancers may have a similar appearance or may be of different histologic types [4,15,18]. The distinction between metastatic and synchronous primary cancers is relatively easy, when they have different histologic types [21,22]. However, the distinction is relatively difficult when they share the same histologic features [21,22]. For that purpose in clinical practise we use well described empirical criteria [21,22].

For most patients with synchronous primary endometrial and ovarian cancers, systematic surgical staging is the baseline therapy [2,4,16-19,23-25]. Systematic surgical staging includes: total abdominal hysterectomy with bilateral salpingo-oophorectomy, total omentectomy, appendectomy, pelvic and para-aortic lymphadenectomy and complete resection of all disease [2,4,16-18,23-25]. Moreover, systematic surgical staging allows a more clear decision for stage related postoperative adjuvant therapy [24,25].

Especially in advanced stage patients, required a more aggressive management with postoperative adjuvant chemotherapy and/or radiotherapy [4,8,16,17,19,20,23,25,26]. The most active chemotherapeutic agents are: taxanes, anthracyclines and platinum compounds [16,19].

Prognostic factors for synchronous primary endometrial and ovarian cancers are: age, stage of ovarian cancer, grade of endometrial cancer and adjuvant therapy [27]. Patients with synchronous primary endometrial and ovarian cancers endometrioid type have a better overall survival than patients with non-endometrioid or mixed

histologic subtypes [14]. Also, patients with synchronous primary endometrial and ovarian cancers have overall 5-year survival 85.9% and 10 year survival 80.3% [18].

The reason for better overall survival of patients with synchronous primary endometrial and ovarian cancers is not intuitively obvious [18]. Usually endometrial cancer produces early symptoms, so synchronous ovarian cancer may be detected at an earlier stage [4,10-13,20,23]. Moreover, favorable prognosis may be related with the detection of patients at early stage and low grade disease with an indolent growth rate [1,4,10-12-20-23].

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