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# Does Cervical Conization Represent A Realistic Treatment Option, In Young Patients with Early-Stage Cervical Cancer?



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#### **Editorial**

Cervical cancer (CC) is the most common cancer of the female reproductive system and represents a significant health problem worldwide [1,2]. The disease usually affects young patients, sometimes before completion of childbearing. In this case, the type of therapeutic approach should be carefully individualized according to disease stage, histologic subtype, fertility issues and performance status [3-9].

Especially in young patients with FIGO stage IA1 or IA2 CC and strong desire for fertility preservation, cervical conization remains a realistic treatment option [3-5, 9,10] Moreover, there is some evidence that selected patients with FIGO stage IB1 CC and small volume disease (less than 500mm3) could be treated with cervical conization and pelvic lymph node dissection [9,11,12].

Eligible patients shouldn't harbor any metastasis to the pelvic or para-aortic lymph nodes [3,4,6,9]. Moreover, they should have a thorough preoperative assessment and an extensive counseling regarding disease recurrence, oncologic outcome, fertility and pregnancy issues [3,4,6-9,13,14]. Especially patients with FIGO stage IB1 and small volume disease should have examination under anesthesia as well as investigation with cystoscopy and pelvic Magnetic Resonance Imaging (MRI), in order to assess the size and extent of disease [9,11,12].

However, the option of conservative approach should not be offered in patients with aggressive (small cell neuroendocrine carcinoma) or potentially aggressive (gastrictype adenocarcinoma, minimal deviation adenocarcinoma) histologic subtypes of CC, even at early-stage disease [3,4,9,15,16].

During cervical conization, the ectocervix and endocervical canal should be excised enbloc in a single specimen [3,8,9,17,18]. The procedure could be performed either with cold knife, laser or electrosurgery [3,4,8,9,17,18]. Cold knife conization provides specimen without any thermal effect on it, which is of utmost importance in the accurate evaluation of resection margins [3,8,9,19,20]. Loop electrosurgical excision procedure (LEEP)

should be performed with additional care, in order to minimize thermal effect on the provided specimen [3,9,19,21]. Especially in patients with FIGO stage IA2 with lymphovascular space invasion (LVSI) or IB1 and small volume disease, pelvic lymphadenectomy with or without sentinel lymph node (SLN) mapping should be performed, as there is increased risk of lymphatic metastasis and disease recurrence [3,4,6,7,9-12,17,22]. The excised lymph nodes should be evaluated using ultrastaging approach [4,9]. The provided surgical specimen should be examined in detail with multiple frozen sections and resection margins should be at least 3mm clear for pre-invasive or invasive disease [3,4,9]. In case of positive resection margins, either cervical conization should be repeated or radical trachelectomy should be performed. In case of lymph node metastasis, either radical hysterectomy or primary chemo-radiotherapy should be advocated.

Perioperative morbidity rates in young CC patients treated with cervical conization are quite acceptable, being relatively low [9,18]. Moreover, patients have less significant perioperative complications compared with others treated with less conservative approaches (radical trachelectomy or radical hysterectomy) [9,23].

Bleeding, discharge and wound infection, are the most common early postoperative complications in patients having cervical conization [9,18]. Cervical stenosis and impaired cervical function are the most common late postoperative complications [9,18,24].

Recurrence rates are similar and quite low, for CC patients with FIGO stage IA1 and IA2 disease treated with cervical conization [3,25,26]. Mortality rates in CC patients with FIGO stage IA1 disease treated with cervical conization, are approximately 0.7% in case of negative resection margins [27]. Lymph node metastasis, involved resection margins and LVSI represent high risk factors for disease recurrence in CC patients treated with cervical conization [3,4,7,9,25,28].

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A series of pregnancy issues related with impaired cervical function are anticipated among patients having cervical conization with depth greater than 1 mm, irrespective of the individual technique used [24,29,30]. The number of conization procedures as well as the depth and volume of conization specimen have a dismal effect on cervical function [9,24,29,30].

The relative risk for premature rupture of membranes (<37weeks) is significantly higher in the subgroup of patients treated with cold knife conization compared with the subgroup of others treated with LEEP, at about 4.11 (95% CI 2.05 to 8.25) and 2.15 (95% CI 1.48 to 3.12) respectively [29]. Moreover, the relative risk for preterm labor (<37 weeks) in the subgroup of CC patients treated with cold knife conization is approximately 2.70 (95% CI 2.14 to 3.40), while in the subgroups of patients treated with laser conization or LEEP is about 2.11 (95% CI 1.26 to 3.54) and 1.56 (95% CI 1.36 to 1.79) respectively. It is obvious that laser conization and LEEP procedure provide better pregnancy outcomes compared with cold knife conization [9,24,30].

#### Conclusion

Cervical conization represents an acceptable treatment approach for carefully selected young patients with FIGO stage IA1 or IA2 CC and strong desire for fertility preservation, without any compromise in oncologic outcome [3-5,9,10]. However, all patients should have a thorough preoperative assessment and a very detailed counseling regarding disease recurrence, oncologic outcome, fertility issues and possible pregnancy complications related with impaired cervical function [3,4,6-9,13,14].

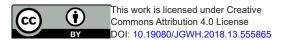
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