Objective: Submucous myomas represent one of the main indications of operative hysteroscopy. Hysteroscopic resection of submucous fibroids should be a simple, well-tolerated and effective procedure and ideally accomplished in only one surgical step. Numerous techniques for the hysteroscopic treatment of submucous myomas have been described, but the cold loop intracapsular myomectomy was conceived with the aim of preserving muscle fibers in the myometrium, providing greater safety for patients, and ensuring the complete removal of the myoma, without causing thermal damage to the myometrium.

Methods: The cold loop intracapsular myomectomy is articulated in three different steps: 1. slicing of the intracavitary component of myoma; 2. enucleation of the intramural component of myoma by the “cold loop”, which is inserted into the cleavage plane between myoma and its pseudocapsule to disconnect by blunt dissection the connective fibers anchoring the myoma to the myometrium; 3. slicing of the intramural component of myoma, which becomes an endocavitary neoformation, safely removable by slicing, without damaging the surrounding myometrium.

Results: Several studied have demonstrated that the use of a cold loop in resectoscopic myomectomy is associated with a low rate of minor intraoperative complications, an absence of major complications and a lower rate of intrauterine adhesions in comparison with the reported literature. Moreover, this technique allows to accomplish the treatment in one surgical step.

Conclusions: The cold loop hysteroscopic intracapsular myomectomy represents a safe and effective procedure for the removal of submucous myomas with intramural development, while at the same time respecting the anatomic and functional integrity of the myometrium. This could be of primary relevance with a view to fertility and future pregnancies.