



# Repeated intravenous indocyanine green application to prove uterine perfusion during uterus transposition

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Deep rectal or anal cancer in women younger than 40 years is a rare event. Pelvic chemoradiation is the standard of care for these entities. However, due to the high radiosensitivity of ovaries and endometrium, pelvic radiation stands in contrast to fertility preservation and must be discussed with the patient.<sup>1</sup> We present the case of a young patient with deep rectal cancer in whom uterine transposition was performed. As first described by Ribeiro et al, 2017,<sup>2,3</sup> the uterus can be released from vaginal and parametrial attachments (including transection of uterine arteries) if sufficient blood

supply to the uterus is provided by anastomosis between the uterine and ovarian arteries. Due to the preservation of infundibulopelvic ligaments, a mobile uterus together with both adnexae can be fixed onto the anterior abdominal wall, and finally, the cervix uteri will be sutured to an umbilical fascia window to ensure menstruation and cervical secretion. Uterine necrosis is a major concern during this procedure, although it seems to be a rare event.<sup>2</sup> With repeated intravenous indocyanine green injections it is possible to check in real time the uterine perfusion during the surgery before and after transection

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**Video 1** The case of a young patient diagnosed with deep rectal cancer. Due to a strong desire to maintain fertility, the patient underwent uterine transposition prior to the radiation therapy. During the surgery, uterine perfusion was repeatedly checked by intravenous indocyanine green injection to lower the risk of post-operative uterine necrosis.

## Video article

of the uterine vessels to minimize the risk of uterine necrosis post-operatively.

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