Ovarian Transposition

Ovarian transposition refers to a surgical repositioning of the ovaries outside the pelvic radiation treatment (RT) field to reduce ovarian exposure.

Ovarian transposition is generally performed using a minimally invasive surgical procedure. The fallopian tubes may be transected from the uterus to ensure adequate mobilization of the ovaries. Metal staples are placed around the ovaries in their new locations in order to assist treatment providers visualizing the ovaries, to avoid including them in the RT fields. This procedure should be performed before RT simulation.

Who is Eligible?
Patients who will be receiving pelvic radiation treatment and whose ovaries are situated within the planned treatment field may want to consider this procedure. Ovarian transposition is an option for women with a planned cancer treatment that carries high risk of infertility due to radiation. It is an option for pre-menopausal females who do not have adequate time for egg or embryo freezing and for pre-pubertal females who are not able to undergo ovarian stimulation and egg retrieval.

What are the Potential Risks/Concerns?
This procedure carries risks for complications from anesthesia and typical risks associated with any invasive procedure, including bleeding and infection.

Future Use and Success Rates
The retention of ovarian function using ovarian transposition is not guaranteed and patients should be offered egg or embryo freezing before treatment if there are no medical contraindications. If the fallopian tubes are resected, the patient will not be able to conceive naturally. Instead the patient would need to undergo ovarian stimulation and trans-abdominal egg retrieval. Alternatively, ovaries may be re-positioned after finishing RT in order to place them back into the pelvis for traditional IVF egg retrieval. If the uterus is exposed to a high dose of radiation during treatment, the patient may not be able to carry a pregnancy herself and may have to use a gestational carrier. Ovarian transposition will not protect the ovaries from the effects of systemic chemotherapy.