

## Changes of uterine blood flow after vaginal radical trachelectomy (VRT) in patients with early-stage uterine invasive cervical cancer

Kota Umemura, Shin-ichi Ishioka, Toshiaki Endo, Tsuyoshi Baba, Yoshiaki Ezaka, Kunihiro Nagasawa, Madoka Takahashi, Masahito Mizuuchi, Nanako Iwami, Hidefumi Adachi, Noriko Takeda, Mitsuharu Tamagawa, Tsuyoshi Saito

**Abstract :**

**Background.** Vaginal radical trachelectomy (RT) ligates and cuts several arteries supplying the uterus. Changes of blood supply to the uterus in two patients who experienced pregnancy and delivery were studied by using 3-D CT scanning. Effects of changes of blood supply to the uterus on the pregnancy courses were also examined.

**Methods.** Vascular distribution in the uterus was studied in two patients who received vaginal RT after delivery. Effects of changes of vascular distribution after vaginal RT were studied with respect to pregnancy courses and cervical functions.

**Results.** New arterial vascularization from the ascending branches of uterine arteries or other arteries occurred, and these new vessels seemed to supply blood to the remaining cervix. Differences of fetal growth and histopathological changes in the placenta between the two patients could not be detected.

**Conclusion.** Ligation and cutting of several supplying arteries by RT induces new arterial vascularization and it does not seem to affect fetal growth and placental function.

**Key Word :**

Radical trachelectomy, uterine cervical cancer, 3-D CT scanning

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