Endometrial Carcinoma Arising from a Double Uterus

Y. Yoshiharu Tsukahara
Y. Yoshihito Fukamatsu
K. Kazuhiko Tomita
T. Tanri Shiozawa
H. Hiroo Iinuma
T. Tom Fukuta

Department of Obstetrics and Gynecology, Shinshu University School of Medicine, Matsumoto, Japan

Key Words
Endometrial cancer
Double uterus
Histopathology

Abstract
We report a rare case of endometrial carcinoma arisen from both horns of an asymmetrical double uterus.

Introduction
Although the incidence of a malformed uterus is not so rare, there have been few reports of endometrial carcinoma arising from such a uterus [1–6]. In the literature we could not find any reports on endometrial carcinoma occurring in both horns of a double uterus. The following is quite a rare case of primary adenocarcinoma arisen simultaneously from both horns.

Case Report
A 61-year-old nulligravid woman with the diagnosis of differentiated adenocarcinoma of the endometrium was referred to our hospital. The physical examination revealed swelling of the left supra-clavicular lymph nodes. The vaginal examination showed a normal uterus and a single external cervical os. The length of the cavum uteri was 7 cm. The pathologic report of a previous series of curet-tage was a well-differentiated papillary adenocarcinoma of the endometrium. All other laboratory data were normal. The intravenous pyelogram showed a bifid ureter at the left and double ureter at the right. The left supraclavicular lymph nodes were resected under local anesthesia. Pathology revealed a metastasized adenocarcinoma.

On laparotomy, the uterus (right horn) showed normal size and position. At the left, posterior to the uterus, a protrudent mass (rudimentary uterus), as large as the tip of the thumb, was observed to be attached to the cervix, which had neither attachment of round ligament nor continuity of the cervical canal. Histologically, as shown in figure 1, the outer side of the mass (left horn) showed a similar structure as the uterine wall, consisting of a covering serosa and thin smooth muscle layer which was demonstrated histochemi-
Fig. 1. Tissues of the outer portion of the rudimentary horn. Note that carcinoma tissues were surrounded by a thin layer of smooth muscle cells (arrow). Watanabe’s silver stain. × 40. Pathology demonstrated a papillotubular adenocarcinoma with marked invasive trend in the core portion of the left horn. On the other hand, a well-differentiated adenocarcinoma was noticed to be localized within the endometrium of the right horn, and myo-metrial invasion was hardly observed. There was no continuity of the cancerous spread between the two horns. Figure 2 shows the schematic illustration of the distribution of cancer tissues in the asymmetrical double uterus. Despite postoperative hormone therapy (tamoxifen plus progestin) [7], the patient died of lung metastasis after 14 months.

Fig. 2. A schematic illustration of the cut surface of the double uterus.

Discussion
The occurrence of endometrial adenocarcinoma in a malformed uterus has rarely been reported [1–6]. While looking through the available reports, no primary adenocarcinoma arising simultaneously in both horns of a double uterus was detectable. Eichner and Simak [4] reported
on a case of uterus didelphys unicollis with adenocarcinoma in one horn and atypical endometrial hyperplasia in the other.
Although the authors are well aware of the fact that the case taken up in this report is not a typical double uterus because of the absence of a Fallopian tube or round ligament in the small horn, it was considered to be a rudimentary uterus (noncommunicating and nonfunctional) as there was a close structural resemblance between the two horns. Moreover the presence of bifid and double ureter should not be ignored as a corroboration of the small horn in this case being a malformation of the uterus. As there was no evidence of continuity of carcinoma invasion between the two horns, it was really hard to explain that the tumor in the left horn made a metastasis to the right horn.

References