Mohs paste for massive genital bleeding from uterine cervix or vaginal stump in gynecological cancer.

Department of Obstetrics and Gynecology, Faculty of Medicine, Kagoshima University, Kagoshima, Japan
Yumi Yanazume, Nobuko Kojima, Kazuto Iio
Dourozo Medical House, Kagoshima, Japan
Haruhiko Dozono
Department of Obstetrics and Gynecology, National Hospital Organization Kagoshima Medical Center, Kagoshima, Japan
Shintaro Yanazuma, Tsutomu Douchi

OBJECTIVES

Atypical genital bleeding due to gynecologic cancer not only impairs patients' quality of life (QOL), but also becomes a major causative factor of death. In patients with increased genital bleeding, palliative radiation therapy or hypogastric artery ligations were considered when hemostasis from recurrent cervical cancer could not be achieved by gauze tampons. A recent study showed that the use of Mohs' paste was effective in stopping local bleeding from advanced malignant wounds such as breast and neck cancer.

In the present study, we first described the clinical usefulness of Mohs' paste for massive genital bleeding from the uterine cervix or vaginal stump in patients with recurrent gynecologic cancer.

METHODS

Mohs' paste

In the 1930s, Mohs first described that chemical fixation using 20% zinc chloride causes tissue necrosis. He developed a method of microscopically controlled tumor excision as a chemosurgery technique. Mohs' paste has been commonly applied to perform chemosurgery of skin cancers. As a result of tissue fixation, there was no bleeding in those surgical operations.

1. Fentanyl was routinely administered intravenously when the patient was unconscious before Mohs' paste application.
2. Mohs' paste was directly applied to the bleeding tumor using a large pledge, with care being taken not to adhere it to the vagina, and soft pressure was applied to the tumor for a few to 40 minutes. The pledge was removed 24 hours later and the process was completed when the surface was dry and hard without bleeding. In patients with repeated genital bleeding after the application of Mohs' paste, this technique was reapplied.
3. Mohs' paste tends to cause inflammation of mucous membranes such as the vaginal wall. Thus, pasting should be selectively done to malignant tissues.
4. As is the case with neck cancer, when the paste is used at a thickness of 1 mm in order to cover the surface of the tumor, the tumor should be fixed to about 5 mm in depth.

RESULTS

Almost complete hemostasis could be achieved by a single usage of Mohs' paste in all patients (Table 3). After fixation with Mohs' paste, the surgical field was hard without bleeding. The effect of this procedure continued for 4 days to 1 year. The effect of Mohs' paste continued for 3 months or more in 3 patients. None of the seven patients have died of genital bleeding.

There were no side effects, except for pain requiring opioids. Pain was caused not only by stimulation with Mohs' paste, but also by the procedure of vaginal extension.

Table 2. Clinical course of 8 patients

CONCLUSION

This study suggests that the use of Mohs' paste was safe and convenient for massive genital bleeding from the uterine cervix or vaginal stump due to recurrent gynecologic cancer. Mohs' paste improves QOL and survival time. If the use, availability, and storage of Mohs' paste can be realized in developing countries, especially where cervical cancer and massive genital bleeding due to end-stage gynecologic cancer are common, Mohs' paste may become a very useful treatment modality.

REFERENCES