

**Alternaria** spp. in the Pap Test of a 25 Year-Old Woman

Çağatay Erşahin, M.D., Ph.D., Sherri Yong, M.D., and Eva M. Wojcik, M.D.*

**Introduction**

A 25-yr-old female with complaints of infrequent, heavy periods and burning of skin during urination came for an annual gynecologic examination and Pap test. The patient’s medical history is significant for genital herpes treated with topical acyclovir, and irregular periods that were nonresponsive to oral contraceptive treatment.

We observed a fungal organism with “snowshoe”-like characteristic appearance consistent with the conidia of *Alternaria* spp. (Fig. C-1A) in her ThinPrep™ (Cytex Corporation, Boxborough, MA). Figure C-1B of a growing culture of *Alternaria* shows muriform conidia, septate and brown hyphae. The organism has a natural brown pigment due to the production of a characteristic melanin-like pigment. *Alternaria* spp. are ubiquitous and are saprophytes commonly isolated from plants, soil, food, and indoor environment. This fungus is usually believed to be a stain contaminant in Pap test. Although there are several cases of human infection caused by *Alternaria* spp., the majority of cases occurred in patients with severe underlying disease or in those receiving immunosuppressive drugs. The reported lesions were mostly cutaneous involving dorsal part of the hands, fingers, elbows, knees, face, and pretibial areas. Rare cases of visceral infections and osteomyelitis due to *Alternaria* have been reported. *Alternaria alternate* is the most common species isolated from human infections. To the best of our knowledge, there are no reported cases of this organism isolated from the uterine cervix. Our findings in this Pap test most likely represent a contamination.
Fig. C-1. (A) Pap test showing *Alternaria* spp. (Papanicolaou stain, ×600). (B) Growing culture of *Alternaria* spp. showing septate and brown hyphae due to the production of a characteristic melanin-like pigment (Lactophenol cotton blue stain, ×400).