

ASBS: Single Catheter Balloon Provides Five-Day Radiation Treatment for Breast Cancer

By Jill Taylor

ATLANTA, GA -- May 5, 2003 -- Brachytherapy via a single catheter with a balloon tip containing an iridium seed is reported to be a viable alternative to whole breast radiation and interstitial brachytherapy for women with operable breast carcinoma.

Jennifer Libbin, MD, of Rush University, in Chicago, Illinois, presented findings here May 3rd on behalf of colleagues at the 4th Annual Meeting of the American Society of Breast Surgeons.

"This is going to have a great impact on women, because they can shorten 6 or 7 weeks of radiation therapy to 5 days," Dr. Libbin said in an interview. "Patients have been very happy with cosmetic outcome, and there's been minimal pain reported during the procedure with either placement or radiation treatment."

The study sample included 77 women (42 to 89 years of age) diagnosed with breast cancer and undergoing a lumpectomy procedure; 74 women completed treatment.

Tumours ranged in size from 0.5 to 2.5 cm. Tumour locations included UOQ in 36 patients, UIQ in six patients, LOQ in six, LIQ in six, and central in 20. Tumour characteristics included T1 in 68 patients, T2 in six patients, invasive in 60, in-situ in 14, N0 in 58, and N1 in two.

Patients received a MammoSite™ balloon catheter (Proxima Therapeutics, Inc.) inserted into the surgical cavity created during lumpectomy. A high dose rate remote after-loader device delivered brachytherapy at 340cGy per fraction for a total of 10 fractions, twice daily over a 5-day period.

According to Dr. Libbin, catheter placement is straightforward. "During the study, the investigators moved toward post-operative placement, usually in an office with ultrasound guidance or a surgicenter type setting," she said.

Complications during treatment included partial necrosis of skin in contact with the

balloon in one patient and balloon rupture in three patients. One case of infection was reported prior to radiation treatment. After radiation treatment, two patients experienced infection and one patient experienced inflammation.

Based on the preliminary findings, the researchers plan to continue evaluating the treatment procedure for efficacy, Dr. Libbin said.

[Poster: Initial Experience with Balloon Brachytherapy of Breast Cancer]