HYPERTHERMIA – A HOPE FOR PATIENTS UNFIT FOR STANDARD GYNECOLOGICAL BRACHYTHERAPY?

N. Piotrkowicz
Brachytherapy Dept. M.S.C Centre of Oncology, Warsaw, Poland

Introduction
Several studies proved biological activity of hyperthermia in gynecological radiotherapy.

Material
Hyperthermia was used in 44 cervical cancer patients unfit for standard intracavitary brachytherapy.

Method
Considering optimal dose distribution, interstitial/intracavitary HDR brachytherapy - hyperthermia combination was used. Brachytherapy was performed during hyperthermia session, using rigid, metal needles and intrauterine probe both for brachytherapy and temperature elevation. The total radiation dose was 20-30 Gy, delivered in 4 fractions of 5 or 7.5 Gy. The procedure lasted for 45-60 minutes with at least 45 minutes period of the temperature values coming up to 46-49° C.

Results
Follow up time is 2-14 months. No severe acute or late reactions were observed. Rapid tumor regression (>50%) during treatment was observed in every case, even when no response can be achieved after external beam dose elevated up to 64 Gy. No case of local failure (in cervix or parametria) was observed during follow up time.

Conclusions
Result of treatment in described group are very encouraging. Further randomized study is planned.