

Assessment and Comparison of Intraoperative and Postoperative Pain Associated with NovaSure and ThermaChoice Endometrial Ablation Systems

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Abstract

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Study Objective. To assess and compare intraoperative and postoperative pain associated with NovaSure impedance-controlled endometrial ablation system and ThermaChoice system.

Design. Prospective, international, multicenter, double-arm study (Canadian Task Force classification II-1).

Setting. Academic medical centers and private offices.

Patients. Sixty-seven premenopausal women with menorrhagia.

Intervention. Endometrial ablation with either the NovaSure (37 women) or ThermaChoice (30) system. NovaSure-treated patients received no endometrial pretreatment; those treated with ThermaChoice received the recommended 3-minute suction dilation and curettage.

Measurements and Main Results. Standard pain measurement instruments (visual analog scale, numeric rating scale) were used to assess intraoperative and postoperative pain. Serum levels of prostaglandin- $F_{2\alpha}$ were measured before and 5, 30, and 60 minutes after the procedure. Patients treated with the NovaSure system reported statistically significantly lower intraoperative and postoperative pain than those treated with the ThermaChoice system ($p < 0.0001$). Procedure time was statistically significantly shorter with the NovaSure system ($p < 0.0001$). Prostaglandin- $F_{2\alpha}$ values did not differ statistically between groups.

Conclusion. The NovaSure system is associated with statistically significantly lower intraoperative and postoperative pain than ThermaChoice system, and endometrial ablation with NovaSure could become an office-based procedure.

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