

ABSTRACT

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Tumour treating fields in glioblastoma: is the treatment tolerable, effective, and practical in UK patients?

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BACKGROUND: Tumour Treating Fields (TTF) in combination with standard therapy, prolongs survival in patients with glioblastoma (GBM). The aim of the current study was to assess the feasibility of integrating TTF into a standard UK neuro-oncology service with a focus on patient tolerability, compliance, and treatment delivery.

METHODS: A prospective study was performed of UK patients with IDH 1 Wild Type, MGMT Unmethylated GBM treated with TTF, in conjunction with conventional therapy. Patient compliance data, device-specific tolerability questions, and an evaluation of disease progression and survival were collected. Monthly quality of life (QoL) questionnaires (EORTC QLQ-C30 with BN-20) examined the trend of global health, psychosocial function, and symptom progression.

RESULTS: Nine patients were enrolled with a median age of 47 (seven males; two females). Overall, compliance with TTF was 89% (range 16-97%). Only one patient failed to comply with treatment. Patients tolerated the device with minimal side effects. Eight patients described mild to moderate skin irritation, whilst all patients were keen to recommend the device to other patients (100%). Most patients found the weight and size of the device to be its biggest drawback (72%). Progression-free survival was 5.5 months and median overall survival was 14.9 months.

CONCLUSIONS: TTF was well-tolerated amongst a small cohort of UK patients, who were able to comply with treatment without any significant complication. QoL questionnaires showed no sustained deterioration in global health, physical and emotional function until the final months of life when the disease burden was greatest.

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