

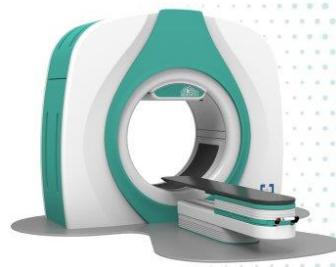
# Early Outcomes of Glioblastoma Treated With IMRT & CBCT Guidance Using Bhabhatron-3i in a Rural Oncology Centre

Chelladurai Ashok, Dinesh Sundararajan, Vijayakumar Subramaniyam, Vijayamurugan Nataraj  
Vijay Super Speciality Hospital & Cancer Centre, Dharmapuri, Tamilnadu

Abstract no-106

## OBJECTIVE

Glioblastoma multiforme is an aggressive primary brain tumor with poor prognosis. Data on the feasibility of cobalt-based IMRT in rural India are limited. To evaluate feasibility, treatment compliance, toxicity profile, and early disease control of IMRT with CBCT guidance using a Bhabhatron-3i unit.



## MATERIAL & METHODS

Retrospective observational study of 38 patients aged 40–60 years.

Surgery: GTR – 2, STR – 30, Biopsy – 6.

Radiotherapy: IMRT 60 Gy in 30 fractions using Bhabhatron-3i with CBCT guidance. Concurrent temozolomide given where feasible.

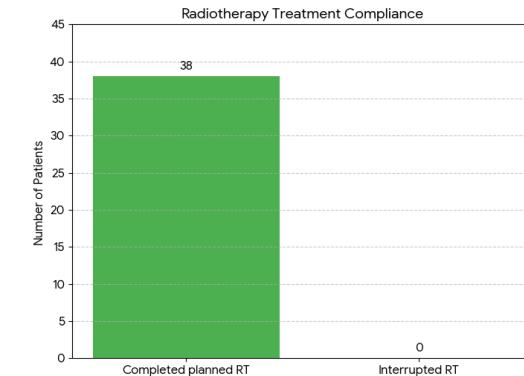
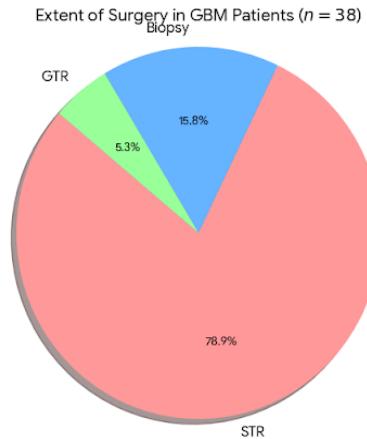
Dr.Chelladurai Ashok

ashokc141093@gmail.com

+91 7291074659

## RESULTS

- All patients completed planned radiotherapy without interruption.
- Acute toxicities were predominantly Grade 1–2 with no Grade 4 toxicity.
- Median follow-up was 12 months with median progression-free survival of 8 months.
- Failures were predominantly in-field recurrences.



## CONCLUSION

IMRT with CBCT guidance using a cobalt-based Bhabhatron-3i platform is feasible, safe, and reproducible in a rural oncology setting, enabling delivery of advanced radiotherapy using indigenous, cost-effective technology.

## References

1. Stupp R, et al. Radiotherapy plus concomitant and adjuvant temozolomide for glioblastoma. *New England Journal of Medicine*. 2005;352(10):987–996.
2. Stupp R, et al. Effect of radiotherapy with concomitant and adjuvant temozolomide vs radiotherapy alone on survival in glioblastoma: 5-year analysis. *Lancet Oncology*. 2009;10(5):459–466.