

Nasopharyngeal Carcinoma (NPC) in Children, Teen and Young Adults: A Single Centre Experience

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Background:

NPC represents less than 1% of childhood malignancies. Generally, disease is locally advanced at presentation and managed with a combination of radiotherapy plus systemic therapy. Relapses tend to be distant however many patients become long-term survivors. We explore treatment and outcomes in Northern Ireland.

Method:

Patients aged 13-25 years treated for NPC between 2000-2020 were included. Staging, histology, treatment and outcome data were manually extracted from hardcopy and digital records for each patient.

Results:

Ten patients were eligible for inclusion; median age 19 years (range 13-25), AJCC stage II-IVB (7th edition). WHO classification (4th edition) and EBV status identified in 7 cases; 7/7 non-keratinising undifferentiated, 6/7 EBV positive. All had induction chemotherapy; 9/10 concurrent chemo-radiotherapy, 1/10 adjuvant interferon-beta. Radiotherapy doses ranged (70Gy/35# [n=8], 60Gy/30# [n=1], 64/32# [n=1]) and technique included 3D conformal (n=5), IMRT/VMAT (n=4) and protons (n=1). Long-term toxicity; 100% xerostomia and 20% ototoxicity. At median follow-up 11.5 years (range 2.7-18.5), 3-year OS 100%, 3-year PFS 90%.

Conclusion:

Treatment comprised of recognised regimes and outcomes appear comparable to published data. International registries remain essential in defining standard of care recommendations for this rare tumour group.