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Abstracts

CR-12. INTRACYSTIC INTERFERON-ALPHA IN PAEDIATRIC CRANIOPHARYNGIOMA PATIENTS: AN INTERNATIONAL MULTI-CENTRE ASSESSMENT ON BEHALF OF SIOP-E AND ISPN

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BACKGROUND: Craniopharyngiomas are frequently diagnosed hypothalamo-pituitary lesions in children where they present as predominantly cystic lesions, lined by a secretory squamous epithelium. Morbidity associated with current therapeutic regimens has focussed attention towards intracystic treatments as a mode of delivery, hypothesised to cause fewer clinical consequences. However, the true efficacy of intracystic therapy remains unclear. We report the retrospective experiences of several global centres in using intracystic interferon-alpha. METHODS: All SIOP Europe and ISPN centres were contacted to submit an anonymised datasheet capturing paediatric patients in their care with a cystic craniopharyngioma that had received intracystic interferon-alpha. Patient demographics, administration schedules, adverse events and outcomes were captured. Progression was clinical or radiological (cyst re-accumulation, novel cysts, or solid growth). RESULTS: Fifty-five children (median age of 6.5 years) from over 20 international centres were identified. Median follow-up was 5 years (0.3–17.7 years; median 2.7 years post interferon). Lesions were either cystic (n = 21; 38%) or cystic/solid (n = 34; 62%). Progression had been treated in 43 (78%) patients prior to interferon use. Progression was delayed by interferon when compared to the preceding therapy for such patients ($p = 0.005$), especially in cystic cases ($p = 0.0001$). Progression post interferon occurred in 40 patients (median 14 months; 0–8 years). Few significant attributable side effects were reported. CONCLUSION: Interferon-alpha appears to delay disease progression in paediatric craniopharyngioma and has a favourable toxicity profile compared to other modalities, both important factors in this developing age group. Prospective, randomised international clinical trial assessment is warranted.