Real-life experience of multidisciplinary pediatric lymphoma tumor board: decision’s impact on Hodgkin Lymphoma treatment choice and results

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Introduction

In France, all classical Hodgkin Lymphoma (cHL) children and adolescents cases are presented in seven multidisciplinary pediatric regional tumor boards (RCPP) to define treatment plan. Between January 2013 and December 2016, no trial was open for recruitment and treatment recommendations were based on the preliminary results of the EuroNet-PHL-C1 protocol. This retrospective work aims to describe RCPP decisions, delivered treatment and outcome of cHL patients during this period for one region (Ile-de-France).

Methods

Medical report, histology, biology, RCPP decisions, of all cHL presented at diagnosis in RCPP Lymphoma “Ile-de-France” with CT scan, MRI, abdominal ultrasound and PET-FDG-CT available were analysed.

Results

Between January 2013 and December 2016, 157 patients were recorded, median age was 14 years; sex ratio was 0.87; and stratification in the treatment groups was as follows: TG1/2/3 respectively 10, 30 and 60%. Patients were treated according to amended EuroNet-PHL-C1 protocol in 123/157 (78%) cases; 34 received a different treatment plan: third cycle of OEPA, adjunction of one or more cycle of COPDAC, Brentuximab vedotin, ABVD, escalated BEACOPP. Complete metabolic response was define on Deauville Score, ie ≤ 3. Radiotherapy indication was defined by the response after the first 2 cycles of OEPA: response was inadequate for 56/157 (36%) patients, 15/56 nevertheless did not received radiotherapy because young age (n=2), extensive disease (n=7), unclear response after 2 OEPA (n=3), medical condition (n=2), progression (n=2) and/or parental refusal (n=2). In 3 cases, patients with adequate response radiotherapy on residual disease. With median follow up of 39 months, 155/157 patients are
alive, 2 patients died (1 unknown reason, 1 relapse treatment toxicity). With a median follow up of 35 months, 19 (12%) patients relapsed; median time between end of treatment and relapse was 4 months (0 to 33 months). Overall survival is 98%, estimated 5 years Event-Free-Survival is 86%, univariate analysis did not identified any significant difference between patients treated with or without radiotherapy. Inadequate response after 2 OEPA course and TG 2/3 were associated to inferior outcome.

**Conclusion**

In a real life experience of tumor board decisions, survival is excellent and relapse cumulative rate in the range of expected result. Of note, the use of radiotherapy was limited to 26% of cases.