

*methods.* We present a case of 28-year old woman suffering from POF due to chemotherapy of the Hodgkin lymphoma (HL) who became pregnant spontaneously during hormonal substitution treatment. *Case report.* A young woman was diagnosed with HL in September 2006. The condition was identified at the clinical stage IIB and treated with 4 cycles of ABVD chemotherapy. During chemotherapy, the patient was treated with gonadotrophin analogues (GnRH-a) to prevent development of POF. Unfortunately, HL relapsed after nearly a year (August 2007) required treatment with salvage (DHAP regimen) and subsequently high-dose chemotherapy (BEAM regimen) with autologous stem cell transplantation. This treatment resulted in POF despite supportive concomitant treatment with GnRH-a. The patient was treated with combined hormonal replacement therapy from May 2008. Two years after the second line oncology treatment, the patient became pregnant spontaneously. Considering the anamnesis of her own 2 healthy children, she decided to undergo termination of her pregnancy. *Discussion and conclusion.* Chemotherapy accelerates atresia of the ovarian follicles. The exact mechanism of its gonadotoxic effect is unknown. POF develops due to the loss of all ovarian follicles containing fetal cells and the likelihood of spontaneous conception is very low. Animal studies have demonstrated the possibility of neo-folliculogenesis of fetal cells from pluripotent bone marrow stem cells, which migrate into the ovary. The case of spontaneous conception described above contradicts the theory of predetermined number of fetal cells in woman's ovary. Our case report demonstrates that POF induced by chemotherapy does not need to be permanent.

**P141****VARIATIONS OF CLINICOPATHOLOGICAL AND SURVIVAL CHARACTERISTICS IN HODGKIN-LYMPHOMA IN HUNGARY**

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*Background.* More reports show changing of the Hodgkin lymphoma's (HL) clinicopathological and survival features recently. *Aim.* Examination the characteristics of our HL patients retrospectively. *Patients and methods.* We examined 439 HL patients, who were treated between January of 1980 and December of 2008. *Results.* In the first period (1980-89) were 177 patients, 1990-99 (second period) were 147 patients, and between 2000-08 (third period) were 115 patients. We observed a reduced male-to-female ratio (I. period: 1,42, II. period: 1,45, III. period: 1,04). The mean age was 40,1 years, 35,9 years, and 36,8 years (I. v. II. v. III. period). Comparing the distribution of HL cases diagnosed at 3 different time periods, we detected decreased frequency of the mixed cellularity subtype (43,5%, 58,5% v. 42,6% P<0,0098), and an increased frequency of the nodular sclerosis subtype (24,85%, 27,2% v. 34,78% P<0,1734). We diagnosed more early stage patients (33,33%, 30,6% v. 59,12% P<0,0001), than advanced stage (66,67%, 69,38% v. 40% P<0,0001). From the first symptom (lymphadenomegaly and/or complain) until the diagnosis of the disease lasted an average 6.2 months in the first period. In the second period this only took 4.2 months and only 2.6 months in the third period. Five-years overall survival were 68,4%, 73,3%, and 91%. *Conclusions.* The comparison of HL cases from the same geographic area during different time period provides an opportunity to observe the changing of clinicopathological features of HL.

**P142****NEW INSTRUMENT FOR COMPREHENSIVE SYMPTOM PROFILE ASSESSMENT IN HODGKIN'S LYMPHOMA PATIENTS: APPLICABILITY AND CHARACTERISTICS**

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Comprehensive assessment of symptoms during and after treatment in Hodgkin's Lymphoma (HL) patients is of great value. The goal of this study was to test the applicability of a new symptom assessment tool – Comprehensive Symptom Profile in Lymphoma Patients (CSP-Lym) in patients with HL. CSP-Lym is being developed to assess the severity of 45 symptoms specific for lymphoma patients. It consists of numerical rating scales, scored from "0" (no symptom) to "10" (most expressed symp-

tom). Six clusters of symptoms have been identified, which were clinically relevant and increased the practicability of the tool. Applicability of CSP-Lym in HL patients with preliminary analysis of psychometric properties was tested in a pilot study. 47 HL patients (Stage I-II, n=34; Stage III-IV, n=13) were included in the study. Mean age was 28.7 years old; male/female distribution –16/31. The utility of CSP-Lym was demonstrated: all the items were easy for the patients to read and understand; the data produced by the tool were clear for interpretation by physicians and were used by them in clinical decision making. Reliability of CSP-Lym was satisfactory (Cronbach's alpha coefficient varied from 0.74 to 0.94). The construct validity of CSP-Lym was proved by factor analysis and "known-group" comparison. Statistically significant differences (P<0.05) in symptom severity were found in the groups with/without B symptoms: 60% of symptoms were more severe in patients with B symptoms as compared with the group without B symptoms. Sensitivity to changes was demonstrated by comparison of symptom severity before and after treatment. Thus, CSP-Lym is an appropriate and practical tool to assess the symptom severity in patients with HL. The utility of the questionnaire was shown; preliminary psychometric properties appeared to be satisfactory. Further studies are needed before the wide-spread use of CSP-Lym in clinical practice and clinical trials in this patient population.

**P143****IS INTENSIFICATION OF THERAPY IN HL PET2+ PATIENTS REALLY USEFUL?**

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*Background.* As reported from recent studies, PET2- in patients with HL is an important prognostic factor and a positive predictive value for survival. In order to analyze the feasibility of a prospective randomized study based on early intensification we evaluated retrospectively the outcome of HL pts with PET2+ treated with ASCT as intensification compared with a group of patients conventionally treated. The characteristics of the two groups of patients were homogeneous in terms of clinical features and risk factors. *Methods.* Fifty-seven pts with Hodgkin Lymphoma (HL) and a PET2+, from different Italian centres, were examined: 23 M and 34 F; median age 36 yrs (range 17-77); Hystological types: 44 pts SN, 6 pts MC, 5 pt classical type, 1 pt LP and 1 pt PTS; 16 pts stage IIA and 41 stage IIB-IV. Thirty-one patients (54%) underwent ASCT: 10 pts have undergone ASCT during first-line or immediately after the end ("early"), 21 pts underwent ASCT after at least 3 months from the end of therapy. Twenty-six pts (46%) did not receive an intensification with ASCT: 16 pts were in CR at the end of 1st line therapy, 5 pts were in RP and 5 pts were in PD. *Results:* Eight out of the ten patients that underwent "early" ASCT are alive in CR (80%) and two pts (20%) are dead in progression. Twenty-one pts were transplanted as salvage therapy; eleven of them (52%) are currently in CR, 1 is in PD (5%), two are in MR (10%) and seven are dead in PD (33%). The current status of the 26 pts who did not receive ASCT is the following: 18 pts are in CR (68%), 2 pts are in RP (8%), 2 pts are in PD (8%) and 4 pts are dead in progression (16%). *Conclusions.* Our data show that the "early" ASCT has an advantage in terms of achievement of remission. A large randomized study to understand if early ASCT is necessary for all pts with HL and PET2+ is really mandatory.

(On behalf of Intergruppo Italiano Linfomi III).

**P144****THE USE OF FDG POSITRON EMISSION TOMOGRAPHY (FDG-PET) IN PATIENTS WITH HODGKIN LYMPHOMA (HL) IN THE "REAL WORLD": A POPULATION BASED STUDY FROM NORTHERN ITALY**

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**Background.** We conducted a population based study to assess how FDG-PET is currently used in patients with HL. **Patients And Methods.** Four Cancer Registries from northern Italy (Modena, Ferrara, Parma and Reggio Emilia) were used to identify patients with HL diagnosed from 2006 to 2008. The study was limited to HIV negative adult patients (Age 18 to 75 years). CT and PET scans were collected before treatment start (B), at the end of treatment (F) and during treatment (I) and were coded according to local report. **Results.** One hundred and thirty six patients out of 185 patients initially collected were identified as study population. M/F ratio was 1.06 and median age was 38 years. Fifty-seven per cent had advanced disease and 13% were enrolled in a clinical trial. Overall, 324 PET scans were performed that correspond to an average of 2.38 scans per patient (2.51 if calculated for patients with at least one PET). B-PET, I-PET and F-PET were performed in 112 (82%), 89 (65%) and 116 (86%) patients, respectively. I-PET was more frequently performed in patients enrolled in a clinical trial ( $P=0.001$ ) and in those with advanced disease ( $P<0.05$ ). I-PET was coded as positive in 16% of cases, 11% and 19% of patients with early or advanced disease, respectively ( $P=0.5$ ). No laboratory or clinical parameter was predictive of I-PET results. F-PET was positive in 13% of cases, 0% and 22% of patients with early or advanced disease, respectively. The 3-year overall survival (OS), 3-year relapse free survival (RFS) and 3-year failure free survival (FFS) were 92%, 90% and 73%, respectively. I-PET result was prognostic factor for FFS (HR 5.33: IC95% 2.23-12.8) and RFS (HR 18.2: IC95% 3.32-99.5) but not for OS. F-PET result was the only prognostic factor for OS (HR 14.2: IC95% 3.25-61.8). **Conclusions.** FDG-PET is widely used for patients with HL also outside clinical trials. The prognostic role of I-PET result for FFS and RFS is confirmed also in the real world; in addition, result of F-PET can be used to predict OS.

#### P145

##### BASELINE AND DYNAMIC PROGNOSTIC FACTORS IN NEWLY DIAGNOSED CLASSICAL HODGKIN'S LYMPHOMA

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**Introduction.** Classical Hodgkin's lymphoma (HL) is a highly curable disease; nevertheless a minor but not negligible part of patients (pts) is refractory to treatment or relapses. We retrospectively analyzed 105 consecutive HL pts in the attempt to identify characteristics, both at baseline and during therapy, predicting for outcome in terms of overall survival (OS), event-free survival (EFS) and relapse-free survival (RFS).

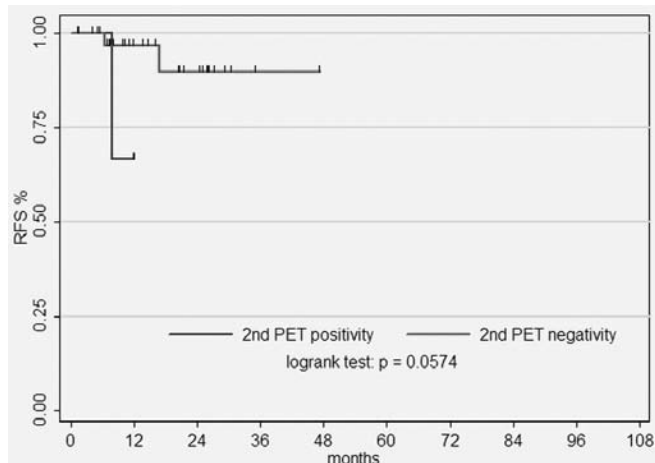


Figure 1. Interim PET positivity and EFS.

**Patients and methods.** Median age at diagnosis was 36 years; 46 pts were male. Stage at presentation was localized in 62 pts (59%) and advanced in 43 pts (41%). B symptoms were registered in 45 cases (42,8%), a bulky mass in 30 pts (28,6%) and extra-nodal involvement in 36 pts (34,3%). Pts were treated with 3 to 8 ABVD cycles according to stage and involved-field radiotherapy (RT) was delivered to 24/62 early stage pts (38,9%). Pts underwent interim PET after 2 cycles. Final restaging consisted of both CT and PET. Therapeutic plan was completed irrespectively to interim PET outcome. **Results.** After a median follow-up of 36 months median OS was not reached, while EFS was 80.5 months. Complete response was obtained in 81 pts (77,1%), partial response in 9 pts (8,6%), while stable or progressive disease was observed in 15 pts (14,3%). Presence of B symptoms, bulky mass and extra-nodal disease correlated to RFS ( $P=0.0314$ ,  $P=0.0076$  and  $P=0.0058$ ). Interim PET was positive in 10,3% and 32% of localized and advanced stages, respectively. Interim PET positivity showed a borderline correlation with RFS ( $P=0.057$ ) (Figure 1). No correlation was found between residual mass of any size at final CT and RFS ( $P=0.746$ ) (Figure 2). RT was associated with longer EFS in early stage pts ( $P=0.032$ ). **Conclusion.** This analysis confirms the unfavourable prognostic value of B symptoms, bulky disease and extra-nodal involvement at diagnosis of classical HL. Interim PET, even if didn't reach statistical significance in this small cohort, seems to predict EFS. Presence of a residual mass at final CT didn't correlate with RFS, irrespectively to size. Radiotherapy improves early stage pts outcome in a combined modality and should not be omitted outside of clinical trials.

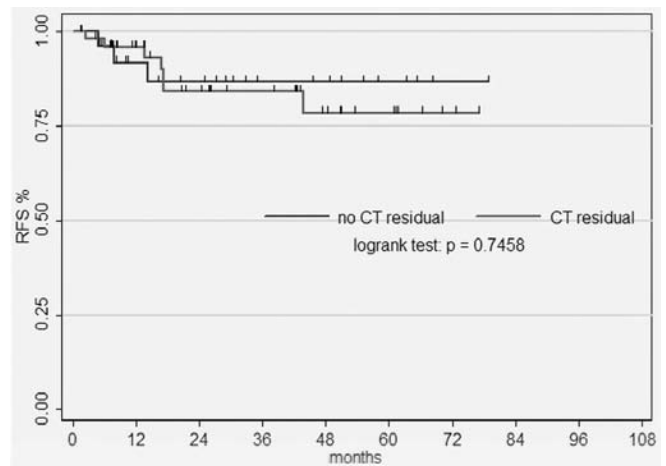


Figure 2. CT residual mass and RFS.

#### P146

##### THIRD TUNISIAN PROSPECTIVE MULTICENTER STUDY FOR ADULT HODGKIN LYMPHOMA (HL): MDH 2008 PRELIMINARY EVALUATION OF THE RESULTS

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The High rate of relapse: 23% in favorable (fav) advanced HL (IPS<3, treated by 8ABVD) and the adverse prognostic factor of bulky mediastinal mass were the major issues detected in the second Tunisian prospective study (MDH2002). The third prospective study (MDH2008) was opened in July 2008 with the main objectives to improve EFS in patients with unfavorable HL (Gr3: stage II with bulky mediastinum, III-IV), to reduce toxicity in patients with favorable HL (Gr1: Fav stage I, II according to EORTC criteria) and intermediate HL (Gr2: Unfav stage I-II with no bulky mediastinum). **Patients.** From July 2008 to December 2009, 80 eligible patients (pts) with HL were enrolled to the MDH2008 in four centers. 73 pts with median age of 26 years (16-73 yrs) and a sex-ratio of 0,78 (32M/41F) were evaluable. Advanced stages were present at diagnosis in 54,2% of cases. 68,5% of our pts were B and 38% had a bulky mediastinal mass. **Methods.** Gr1 pts (5,5% of pts) in complete response (CR=response≥75%) after 2ABVD receive 30Gy involved field (IF) radiotherapy: RT. If partial response (PR) after initial 2ABVD, pts receive one