body-induced hemolysis (the premature destruction of circulating red blood cells). Usually idiopathic, it is also associated with infection, lymphoproliferative disorders, autoimmune diseases, and some drugs.
Aims: Study the epidemiological, clinical, biological, etiological and therapeutic aspects of AIHA.
Methods: This is a retrospective and analytic study about 100 cases of AIHA observed in the hematology and internal medicine departments of Sousse, over a period of 14 years. In this work, we have tried to describe the clinical aspects of these AIHA and evaluate the contribution of different diagnosis exploration and therapeutic means used.
Results: There were 40 men and 60 women (sex ratio=0.66) with a median age of 51 years [14-87]. Regarding the medical history, 19 patients were hypertensive, of whom 8 were receiving Methyldopa, 9 patients were diabetic, 7 had thyroid dysfunction and 18 had a history of autoimmune disease. The circumstances of discovery were an anemic syndrome in 80 of patients, mainly due to paleness and asthenia. Physical examination revealed icterus in 42 cases, splenomegaly in 41 cases, hepatomegaly in 8 cases, lymph node in 16 cases and fever in 21 cases. Concerning biology, regenerative anemia was normocytic in 43 cases and macrocytic in 48 cases, thrombocytopenia below 100000/mm^3 was observed in 13 patients. There were also biological signs of hemolysis: hyperbilirubinemia in 70 patients, high LDH rate in 68 patients. Direct Coombs test was positive for IgG in 55 cases, C in 12cases, Ig G+C in 20cases, IgA in 1 case, IgG+C +IgM in 4 cases and cold agglutinins search returned positive in 8 cases. There was Evans syndrome in 14 patients. AIHA was idiopathic in 45 cases including 3 cases of pregnancy. In the other cases, it was secondary to lymphoproliferative desorders in 20 cases, autoimmune disorders in 25 cases, drug taking (Methyldopa) in 8 cases, associated with a myelodysplastic syndrome Methyldopa in 1case and CMV infection in 1 case. The therapeutic consisted of transfusion in 37 cases and all patients received corticosteroid treatment in addition to folic acid therapy and etiological treatment in the non idiopathic cases. A complete remission was obtained in 55 cases. In severe cases of chronicity or relapse, immunosuppressive therapy was prescribed in 14 patients, anti-CD20 monoclonalantibody were prescribed in 8 patients and splenectomy was performed in 3 patients.
Summary and Conclusions: Glucocorticoids and/or intravenous immunoglobulins are the mainstay of the treatment in the majority of patients with warm AIHA. When these treatments fail, patients often require cytotoxic drugs or splenectomy. The current research in many other autoimmune diseases that can sometimes be associated with AIHA should still allow a better understanding of the mechanisms involved in the occurrence of these diseases and to refine treatments whose essential aim is to improve the effectiveness of both new and already available treatments (including rituximab) in order to limit the use of corticosteroids.

E1401

PROSPECTIVE STUDY OF PLASMA BIOMARKERS ASSOCIATED WITH THE INFLAMMATORY RESPONSE IN TYPE 1 GAUCHER DISEASE PATIENTS TREATED DURING ONE YEAR WITH VELAGLUCERASE ALFA

M. Andrade-Campos[1,*] J. Gervas[2], I. Garcia[3], O. Salamero[4], P. Martinez-Odriozola[5], J.-A. Mendez[6], F. Garcia-Bragado[7], C. Fernández[8], L.-I. Sancho-Val[9], H. Cano[10], J. Perez[11], J.-M. Hernandez-Rivas[12], J.-F. Lorenzo[13], M. Lopez-Dupla[14], M. Callao[15], P. Giraldo[2]
[1]Unidad de Investigación Traslacional. CIBERER, HUMS, [2]Unidad de Investigación Traslacional. CIBERER, [3]Pediatrics, Miguel Servet University Hospital, Zaragoza, [4]Haematology, Vall d'Hebron, Barcelona, [5]Internal Medicine, Basurto Hospital, Bilbao, [6]Haematology, Ourense Hospital, Ourense, [7]Internal Medicine, Josep Trueta Hospital, Girona, [8]Haematology, Cabueñes Hospital, Gijon, [9]Haematology, Alcañiz Hospital, Alcañiz. Teruel, [10]Haematology, Arcos del Mar Menor University Hospital, Murcia, [11]Internal Medicine, Vall d'Hebron, Barcelona, [12]Haematology, Salamanca University Hospital, Salamanca, [13]Internal Medicine, Burgos Hospital, Burgos, [14]Internal Medicine, JoanxXIII Hospital, Tarragona, [15]Internal Medicine, Arnau de Vilanova Hospital, Lleida, Spain

Background: Background: It is wide accepted that Gaucher patients have an impairment in their immune system, clinically reflected by a infections tendency and biologically by a chronic inflammatory state. The role of cytokines in this inflammatory state is partially known, and the modifications in this profile in GD patients under enzymatic replacement therapy (ERT) are under investigation. Our group has reported some changes on the cytokine profile in patients with severe bone involvement[1] and some inflammatory biomarkers of macrophage activation related to the iron profile[2].
The progressive infiltration by engorged macrophages led to a production of proinflammatory cytokines into bone marrow microenvironment, altering of the bone turnover, producing imbalance in cellular function, angiogenesis and patchy infiltration by Gaucher cells.
Aims: Aims: To explore the changes in the biomarkers of immune response in a cohort of Spanish type 1 Gaucher disease patients (GD1) after one year on Velaglucerase alfa therapy.
Methods: Patients and Methods: A total of 17 GD1 patients from 15 centers, were included in a prospective protocol following these criteria: symptomatic patients of both sexes, aged older than 4 years, naïve or previously treated but without ERT at least one month previous to be included. The study included blood counts, liver and spleen volume by MRI and bone marrow MRI evaluation following S-MRI protocol, and determine bone mineral density by Quantiative Ultrasound expressed by Z-score, and biomarkers: Chitotriosidase, CCL18/PARC, ferritin, immunoproteins and the following cytokine profile: IL-10, IL-13, IL-4, IL-6, IL-7, Mip1a, Mip1b,TNFa, performed at baseline and 12 months after therapy. The study was approval by ethical committees and designed according Helsinki declaration rules; every one patient signed the informed consent and commitment to use a safe contraceptive method during the study period and 3 months after completion of treatment. Non-parametric tests Mann-Whitney-U and Kruskall-Wallis-H were used. Period of study: November 2011- April 2014.
Results: Results: General characteristics: 9 males, 8 females, mean age: 37.5 years (9-72). 3 splenectomized patients (17.6%); genotype: 3 N370S homozygous one heterozygous for N370S/L444P and the rest heterozygous for N370S/other. Seven patients (41.2%) have previous history of bone disease complications. All patients received velaglucerase alfa 30U/kg iv every two weeks for 1 year in every day clinical practice. Patients achieved an objective response on disease goals, after normalization and/or stabilization in blood counts and visceral volumes no significant variation were observed. Nevertheless a significant increase in the Z-score was observed after one year on Velaglucerase alfa therapy. Respect to biomarkers, a reduction or stabilization of CT activity and CCL/18 concentration were observed, also ferritine concentration and serum free light chains do not show significant variation. The cytokine profile showed a decrease in all inflammatory cytokines tested, however for Mip1a (p=0.027) and TNFa (p=0.023), a significant reduction were registered. Table1. No infusion reactions were reported, neither antibodies against velaglucerase alfa.

Table 1. Comparative reduction of cytokines between baseline and 12 months.

	IL10	IL13	IL4	IL6	IL7	Mip 1a	Mip 1b	TNF a
Chi X^2	3.415	0.000	2.668	1.606	1.545	8.159	3.308	4.263
grade	2	2	2	2	2	2	2	2
significance	0.181	1.000	0.263	0.448	0.462	0.017	0.191	0.023

Summary and Conclusions: Velaglucerase alfa is a well-tolerated therapy in every day clinical practice. In our cohort we observed as part of the response to therapy a significant decrease on the inflammatory state reflected through the cytokine reduction.
Acknowledgements: This work was partially supported by a grant from Shire and FIS: PS12/01219.

Reference
1. Gervas J *et al.* PlosOne 2015. 2.-Medrano-Engay B *et al.* 2014.

E1402

A CASE OF INDOLENT SYSTEMIC MASTOCYTOSIS IN A GIRL TREATED WITH INTERFERON

Y. Altuner Torun[1,*] M.C. Serbetci[2], F. Mutlu Sarıguzel[3], A.B. Ergul[4]
[1]Pediatric Hematology, [2]Kayseri Education and Research Hospital, Kayseri, Turkey, [3]Immunology Department, [4]Peiatrics, Kayseri Education and Research Hospital, Kayseri, Turkey

Background: Mastocytosis refers to a group of myeloproliferative disorders characterized by excessive proliferation and accumulation of mast cells in tissues. It is rare in both adults and children and occurs in less than 0.01% of the general population.
Aims: A 5-year old girl who was diagnosed as cutaneous mastocytosis by our dermatology department when she was four months of age, was admitted to our pediatric hematology department by hepatosplenomegaly. In physical examination, widespread maculopapuler and itchy lesions were determined.
Methods: The assessment of bone marrow aspiration was found to be consistent with mast cells (rate >10%). Flow cytometry on bone marrow sample revealed that there was CD117/CD25 positivity of 18.4% and CD117/CD2 positivity of 0.7%. Diagnosis of SM was verified by one major and one minor WHO criteria: presence of multifocal, dense aggregates of mast cells in bone marrow (major criteria) confirmed by expression of CD2, CD25, and CD117 in bone marrow (minor criteria). Also serum tryptase level was 356 ng/ml (>20 ng/ml).
Results: We were diagnosed smouldering SM (a part of indolent SM) because of high serum tryptase level, organomegaly, and infiltration of mast cells in the bone marrow. During follow up, systemic anaphylaxis was determined and treated for three times. We recommended the self-administration of epinephrine on demand for anaphlactoid episodes. Treatment with montelucast, interferon alfa-2a and methylprednisolon produced a marked and sustained reduction in her symptoms, cutaneous lesion, and tryptase level (Figure 1A-B).