a) to describe the socio-demographic and health characteristics of 330 families included in the project;

b) to describe the continuing care comparing 73 newborns at an ecological risk hospitalized at September 2007 to December 2007, 167 newborns at an ecological risk hospitalized at January 2008 to June 2009 with 80 Italian newborns at a biological risk;

c) to compare the developmental indexes in a group of 30 newborns (15, target group and 15 control group) matched for gestational age, weight and length of hospitalization. The early results seems to confirm the hypothesis that care discontinuity is particularly present in the migrant population group. This population appears to be exposed to risk concerning psycho-motor development, particularly in the social relations and oculomotor coordination domains.

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STUDY OF SOME INFLAMMATORY MARKERS IN CHILDREN WITH MODERATE PERSISTENT BRONCHIAL ASTHMA BEFORE AND AFTER THERAPY WITH INHALED CORTICOSTEROIDS

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Inhaled corticosteroids is the mainstay of bronchial asthma therapy (BA) because it targets the underlying airway inflammation. This study included 30 children aged 5-15 years with moderate persistent asthma . The aim was to study some inflammatory markers (sputum eosinophils SE , AEC, eosinophilic cationic protein ECP, and TNF-~) and measurement FEV1/FVC as an indicator of obstructive airway disease. The measurements were done 3 times for the patients and once for 20 age and sex matched healthy children (control group) . The first sample was taken in both groups before start of therapy. The second was done for the patients after 3 months of ICS and the third was taken with reappearance of symptoms of BA during or after complete withdrawal of ICS over 4 months. Our patients in the pretreatment sample had significantly higher levels of sputum eosinophis, AEC, ECP, TNF- ~, and FEV1/FVC compared to the control . Compared to the pretreatment values these values except AEC decreased significantly after 3 months of ICS. Relapse occurred in 25 patients during withdrawal of the ICS therapy

and only 5 patients remained asymptomatic after complete stoppage of the treatment. Relapse was associated with significant increase in the levels of TNF-~ and SE in the third sample compared to the second sample . We conclude that non-invasive assessment of airway inflammation is enough to monitor children with BA. ICS is an effective tool against this inflammation. TNF-~ followed by sputum eosinophils are sensitive predictors of relapse in the children with BA.

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THE MOST FREQUENT FLAWS REGARDING THE TENDING OF THE ASTHMA ATTACK IN CHILDREN IN FRANCE

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Context: Seemingly emergency treatment of episodes of asthma attack suffers from therapeutic attitudes which do not match usual international recommendations.

Purpose: During specialised consultations we have aimed to assess the most common flaws regarding the tending of children's asthma exacerbations by our local care dispensers.

Method: We opened a prospective data collection of 100 children who had had an asthma attack in the weeks before the consultation, during the winter 2007/2008. The children are between 2 and 16 years old (average age of 6 years 4 months). The gender ratio is 60% male and 40% female. 49% of them have had their persistent asthma confirmed for more than 6 months, 35% for more than 2 years and the remaining 16% for as long as 5 years.

Results: In 39% of cases, short-acting inhaled Beta2-agonists are neither prescribed nor advised. In 68% short course of oral corticosteroids are not resorted to. Combination of long-acting inhaled Beta2-agonist and inhaled corticosteroids are used for treating the attack in 21% of children, usually over a few days long. Several other, non-accredited, alternative treatments (e.g. anti-histamins, leukotrien-antagonists, homeopathy) are used in 24% of cases.

Conclusions: The tending of asthma exacerbations in children in our area shows:

- an obvious corticophobia,

- an under-use of short-acting inhaled Beta2-agonists,

- a first intention use of combination of inhaled long-acting Beta2-agonist and inhaled corticosteroids.

Practical implications: It seems important during Continual Medical Education sessions on child asthma to insist on the distinction to be made between emergency treatment and long-standing medications

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EFFECTS OF CASEIN AND ADAPTED-MILK FORMULA ON THE PROLIFERATION OF LYMPHOCYTES, MID-CELLS AND GRANULOCYTES AND ON CIRCULATING LIPIDS

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Background: The casein is the main protein that appears to be involved in childhood diseases caused by the consumption of adapted infant-milk formula (IMF).

Objective: To measure the effect of casein of one of the most adapted IMF marketed in Algeria, on the proliferation of lymphocytes, granulocytes and cells MID and on the change in lipid profile.

Materials and methods: Three groups of male rabbits of local breed were used in this study. The first group (n=5, age [±standard error]; 2.900±0.218 months, weight; 936±46.6 g) received different concentrations of casein, three-times daily for 3 days. The second one (n=5) received whole milk by gavage at 5 mL, three-times daily for 3 days (age; 2.7±0.289 months, weight; 932±38.26 g). The third group (n=8) was considered as controls (age; 2.625±0.286 months, weight; 892.5±60.70 g).

Results: Serum levels of TG and VLDLc were significantly lower in rabbits receiving whole milk compared to controls ($p=0.001$ for both comparisons); however, those of LDL were significantly increased in rabbits receiving the casein solution ($p=0.046$). Additionally, oral administration of casein or milk caused a significant increase in rates and

proportions of leucocytes, granulocytes, cells MID, and a significant decrease in the proportion of lymphocytes.

Conclusions: Casein or IMF consumption can induce increased activity of phagocytes, eosinophils and basophils and inhibition of lymphocytes proliferation. Additionally, whole milk could be beneficial in the prevention of overweight and childhood obesity, while milk casein can cause an atherogenic risk at high concentrations.

Keywords: Casein, immune cells, lipids, adapted infant-milk formula

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FACTORS INVOLVED IN THE POSTPONING OF ASTHMA DIAGNOSIS IN CHILDREN

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Objective: To identify factors with impact on postponing the diagnosis of asthma in children.

Method: Cross-sectional analysis of paediatric asthma cases from a Regional Centre for Asthma. Age of onset for symptoms and age of diagnosis of asthma in children, and potential risk factors of delay of diagnosis were analysed using multivariable linear statistics. Primary end-point was the ratio: age of the children at the time of the asthma diagnosis (years) vs. duration of asthma-like symptoms at the time of the diagnosis (years).

Results: The data base included 45 cases, (i.e. 26 boys, age 6,3±/-3,2 yrs.). Independent risk factors for the delayed asthma diagnosis were: the absence of asthma history in parents and/or siblings (OR: 24,8 and 95%CI: 6,2 to 95,3), the absence of atopy (OR: 18,2 and 95%CI: 5,3 to 62,1), the absence of allergic rhinitis symptoms (OR: 14,5 and 95%CI: 4,8 to 42,7). Family income, level of the education for the parents/caregivers, and living in rural areas did not significantly postponed the diagnosis.

Conclusion: Collected data support the recommendation of increased practitioner awareness towards asthma detection in the presence of certain risk factors in children with asthma-like symptoms