Some Characteristics of Tinea Capitis

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Tinea capitis (TC) is the dermatophytosis widespread in the world[1,2]. Not only specter of causative species in a specific geographical area is changing in time, but also the distribution of each one worldwide. No data exists on TC for recent 25 years in our country. Following goals were set for the study: to determine the specter of TC causatives and importance of age and sex in disease development, to identify source of the disease.

We have conducted a prospective study. During the last three years 13901 dermatological patients were examined. Among them 118 patients with TC were identified and studied. Skin scrapings and hair samples were examined by microscope. Fungal cultures were grown on Sabouraud's Dexstrose Agar with chloramphenicol. Exposure to the light of Wood's lamp was used in all patients. The data analyses were evaluated by SPSS system. Likelihood Ratio Chi square test and Fisher's exact test were used. $P<0.01$ was considered statistically significant.

From 118 patients 92 (78%) were males and 26 (22%) females. Age of the patients varied from 12 months to 14 years, distributed into 3 age groups: 28 (23,7%) patients were in 12 months to 4 years age group, 58 (49,2%) patients were from 5 to 9 years old, and 32 (27,1%) from 10 to 14 years. Microscopic examination revealed ectotrix-type causative agent in 107 (90,7%) cases, and endotrix type in 11 (9,3%) cases. The results of culturing were positive in 81 (68,6%) cases. Zoophilic causative agent was in 69 (85,2%) cases, and anthropophilic causative agent in 12 (14,8%) patients. Among those *Trichophyton violaceum* was diagnosed in 7 (8,6%) cases, *Trichophyton mentagrophytes* in 33 (40,7%), *Trichophyton verrucosum* in 5 (6,2%), *Microsporum canis* in 31 (38,3%), and *Microsporum ferrugineum* in 5 (6,2%). *Trichophyton mentagrophytes* and *Microsporum canis* were significantly more frequent than all the other causatives. Green light under Wood's lamp was observed in 36 cases. In all cases of *Trichophyton mentagrophytes* and *Trichophyton verrucosum* the disease was caused by cattle. In cases caused by *Microsporum canis* the source was a cat. In case of infections caused by *Microsporum ferrugineum* and *Trichophyton violaceum* the source was impossible to identify.

Statistical processing of the resultant data of our study disclosed the association of age with spread of the disease. It turned out, that the highest prevalence of the disease is observed in children from 5 to 9, also the disease was prevalent primarily in males ($P<0.01$). We also discovered changes in causatives' species. *Trichophyton violaceum* was predominant causative agent among Trichophytons in the 80ies, less prevalent was *Trichophyton mentagrophytes*. According to the results of our study, *Trichophyton mentagrophytes* turned out to be the predominant causative. The rise of *Microsporum canis* frequency in Georgia confirms its causative importance worldwide[3-5]. Dominant in the 80ies, *Trichophyton violaceum* and *Microsporum ferrugineum* were found in single cases only. One of the important results of the study was identification of *Trichophyton verrucosum* among causative agents - never being observed before in the previous studies in our country. Eventually changing of TC causative species was reflected in dramatic decrease of anthropophilic species and significant increase of zoophilic species.

finally, in our study we have identified signs characteristic for TC: excess of zoophilic forms compared to anthropophilic ones, dominance of *Trichophyton mentagrophytes* and *Microsporum canis* in the specter of causatives, spread of the disease primarily in children, with highest prevalence in the 5-9 age group and male gender.

Key words: Trichophyton Mentagrophytes; Tinea Capitis; Mycosis; Microsporum Canis

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Patent Ductus Arteriousus Device Closure in an Infant with Rubinstein–Taybi Syndrome

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Rubinstein–Taybi syndrome (RTS) was first described by Michail et al[1] and subsequently by Rubinstein and Taybi[2]. We present a typical six-month-old girl with RTS. Her mother had ovarian cancer and polyhydramnios during the pregnancy. Parents are closely related. There were frequent respiratory infections resulting in two hospital admissions. Physical examination revealed typical facial changes including downward-sloping palpebral fissures, prominent forehead, hypertelorism, limited mouth opening, large beaked nose, and high arched palate (Fig. 1). A history of increased tearing was compatible with nasolacrimal duct obstruction. Other features include general hypotonia with delayed developmental milestones, short and broad thumbs and toes (Fig. 1). Chest x-ray showed cardiomegaly (Fig. 2). She had normal karyotype.

A continuous murmur was auscultable in the left upper parasternal region. Echocardiography showed a patent ductus arteriousus (PDA). Angiography confirmed a type E PDA with narrowest and aortic diameters of 3 and 6 mm, respectively. Systolic pressure in pulmonary artery was 45 mmHg. The PDA was closed with a detachable Cook coil 6.5×4 (William Cook Europe, Denmark). A small residue remained which decreased two weeks later on another echocardiogram. RTS is sporadic with a birth prevalence of 1 in 100000 to 125000[3,4]. Both sexes are equally affected[5]. Typical facial expression (comical face) includes downward sloping palpebral fissures, hypertelorism, large beaked nose, malpositioned ears, limited mouth opening, long eye lashes, high arched eyebrows and hirsutism[6]. Skeletal features consist of short stature, broad and deviated thumbs, broad toes, pes planus and scoliosis. Cardiac involvement occurs in about 36%, mostly as atrial or ventricular septal defects, PDA, coarctation of aorta, pulmonic stenosis and bicuspid aortic valve[7].

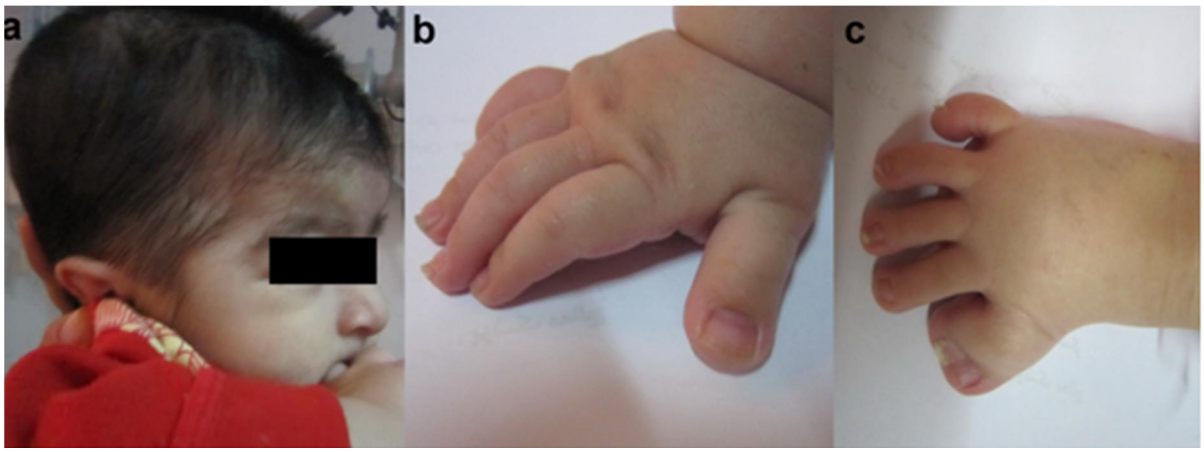

Fig. 1: a. Typical facies and marked hirsutism; **b**. Broad thumb; **c.** Broad toe and abnormal deviation of the other finger

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