Malignant proliferative disorder of leukocytes preceded by father-son psychic traumatism and impaired trustworthiness/functionality of a social relationship "father-son"

J. Sedláček^{1,2}, V. Šišovský^{3,4,5}, M. Turákova⁷, T. Galis², L. Šlapáková³, P. Kotouček^{6,8}

¹University Pastoral Centre of St. Andrew-Svorad and Benedict, Alexander Dubček University of Trenčín in Trenčín, Trenčín, Slovak Republic ²Dept of Pastoral Theology, Faculty of Roman Catholic Theology, ³Inst of Pathological Anatomy, Faculty of Medicine, ⁴Dept of Molecular Biology, Faculty of Natural Sciences, Comenius University in Bratislava, Bratislava, Slovak Republic ⁵Dept of Pathology, ⁶Dept of Hematology and Transfusiology, University Hospital Bratislava,

Dept of Psychiatry, Faculty Hospital Trenčín, Trenčín, Slovak Republic Dept of Clinical Hematology, Worthing Hospital, Worthing, West Sussex, the United Kingdom e-mail: sedlacek.j.research@gmail.com

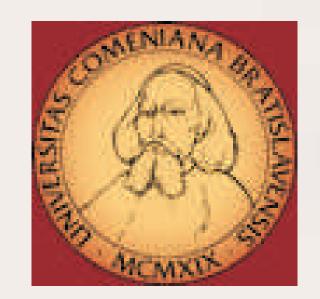
Bratislava, Slovak Republic

"22nd Biennial Congress of the European Association for Cancer Research (EACR-22) – from Basic Research to Personalised Cancer Treatment",

http://eacr22.eacr.org/index.php, http://www.eacr.org/,

http://www.elsevier.com/wps/find/journaldescription.cws_home/672725/description#description

Barcelona, Spain, 7 – 10 July 2012











INTRODUCTION

The fatherhood crisis, father's role deficit, and family disintegration are serious phenomena of human society. They can have negative impact on the healthy mental and then physical development of an individual, many times even with permanent pathological consequences. Malignant proliferative disorders of leukocytes (MPDL) constitute the most important disorders of white cells. The exact etiology of MPDL is not clear. However, a number of factors have been implicated (heredity, environmental factors (ionizing radiation, chemical carcinogens, certain drug), infections (particularly viruses), associations with disorders of immunity (immunodeficiency, autoimmune disease)). Since haematopoietic (haematolymphoid progenitor) cells have a rapid turnover, they are more vulnerable to chromosomal damages and cytogenetic changes under influence of various etiologic factors listed above. Since lymphoid cells are the immune cells of the body, diseases with derangements of the immune system (including AIDS and iatrogenic immunosuppresion) have higher incidence of haematopoietic malignancies. We are describing acute myeloid leukaemia and Hodgkin's lymphoma in two young men exposed to psychosocial stress due to the deficit of the man's role of their father (father-son psychic traumatism) in their social relationship "father—son". The aim of this work is to draw attention to the possibility that seemingly innocent psychosocial stressors (in the form of impaired trustworthiness/functionality of a social relationship "father-son" and/due to father-son psychic traumatism) could be possibly associated in susceptible individuals also with MPDL.

MATERIAL AND METHOD

Subjective and objective (basic, ancillary laboratory and imaging) examinations. Formalin-fixed and paraffinembedded biopsy specimens with bone marrow and lymph node were besides conventional histological staining evaluated histo- chemically (myeloperoxidase, periodic acid-Schiff, non-specific esterase, chloracetatesterase; differentiate leukocyte antigens: CD45, CD45RO, CD20, Cd13, CD33, CD15, Cd30), by a light microscope. In both men we examined trustworthiness /functionality of their social relationship "father—son" and personal features

of "their father" by a questionnaire method.

CASE REPORTS

20 year old (Adam) and 21 year old (Boris) men with psychoneurotic syndrome were admitted due to haematological abnormality to the clinic of haematology with the suspecting MPDL. In Adam in the period before disease for several months there was present preleukaemic syndrome with anaemia and other cytopenias. At admission he had clinical manifestations due to bone marrow failure (anaemia, bleeding manifestations (due to thrombocytopenia), infections, fever) and due to organ leukaemic infiltration by leukaemic (neoplastic "blast") cells (tenderness of bones, lymphadenopathy, splenomegaly, hepatomegaly, other). A combination of routine blood picture and bone marrow examination revealed acute myeloid leukaemia. In Boris in the period before disease there was a low-grade fever with night sweats and weight loss, other symptoms included fatigue and weakness. In clinical features painless, movable and firm lymphadenopathy of the cervical and supraclavicular lymph nodes dominated. In laboratory: some haematologic and immunologic abnormalities. Biopsy from the the lymph node showed Hodgkin's lymphoma. Psychiatric-psychological examination revealed sensitive men, in whom trustworthiness/ functionality (confidence of a son in) of a social relationship "father-son" is minimal to none. In the long term men since the childhood were exposed to serious psychosocial stress from father-son psychic traumatism (deficit of a role of their father: aggressiveness, indifference, absence) and frustration from not fulfilled desire for a functioning social relationship "father—son".

CONCLUSION

Impaired trustworthiness/functionality of a social relationship "father—son" and father-son psychic traumatism could be possibly associated in susceptible individuals also with MPDL.

Acknowledgments

Study conducted with the support of financial donation from Sanofiaventis Pharma Slovakia, Ltd.