Diploma thesis is based on a four-year study the goal which was to demonstrate on a group of pregnant and postpartum women the frequency and severity of thyroid disease in pregnancy and after childbirth, and thus support the introduction of screening of function thyreidopathias into normal practice within screening for congenital defects in first trimester of pregnancy.

In 3937 sera from women in the 10th - 12 week of pregnancy were, with informed consent of pregnant, determined TSH and anti TPO, in the case of FT4 deviation. Of the total number of examined 6,4 % had TSH higher than 4,00 mIU/l, 4,2 % with TSH less than 0,1 mIU/l and 12,4 % of women with positive anti TPO antibodies. 552 women were recommended visiting endocrinology. 106 pregnant women came to be endocrinologically tested to Third Internal Clinic of VFN and 1st LF UK which is the equivalent to 19,2 % of all positive hits and 2,7 % of all investigated over the period. Only 56 women (52,8 %), came for subsequent checks in which the monitoring of the disease continued.

After the endocrinologic examination in pregnancy 60,4 % of women was diagnosed with subclinical hypothyroidism. This subclinical form developed in 39 % of women into an overt hypothyroidism 24 - 30 months after childbirth. Overall, the disease progressed in 41.1% of women. Postpartum hypothyroidism was detected in 7 women (13,7 %). Total of 69,6 % women were treated and less than half of them were adjusted their medication in postpartum. 95 % of women treated for hypofunction had positive anti TPO antibodies, and only 21,9 % of them had a family history of thyroid disorders. Two women developed subclinical hypothyroidism based only on antibody positivity in pregnancy. No dependence on age in dependence on the occurrence of the disease was demonstrated among the group of treated women and the control group of women without thyroid disorders.

This study should help define the scope and merits of universal screening, identify possible needs for improvement of cooperation between gynecologists, endocrinologists and biochemists which is now one of the last steps before the introduction of screening for thyroid function in normal practice.