The First Pregnancy in Estonia of a Patient on Hemodialysis Treatment

Madis Ilmoja[2, 3, 4], Kristin Unt[4], Ines Vaide[1, 2, 5], Virge Aabrams[2], Pille Kilgi[2, 3], Kadri Peedimaa[3], Katrin Saue[2], Ksenja Buts[4], Edward Laane[5]

[1]Resident Physician, [2]Pärnu Hospital, [3]Renalis OÜ, [4]West Tallinn Central Hospital, [5]University of Tartu Institute of Clinical Medicine

BACKGROUND. Medicine is based on guidelines from various specialties, but the patient is a comprehensive individual with their own illness, feelings, and desires. Good interdisciplinary collaboration ensures patient satisfaction. Amyloidosis (AL) is rare disease with severe course, characterised by the abnormal deposition of protein in tissues and organs.

CASE DESCRIPTION. A 36-years old woman presented in November 2020 with S-albumin 13g/L, U-prot 11g/24h, eGFR 32ml/min, S-proteinogram showed IgG-lambda M-protein. Kidney histology revealed amyloidosis, severe interstitial fibrosis with tubular atrophy. Amyloid deposition was noted in the heart muscle, subcutaneous tissue, bone marrow.

Systemic treatment of AL was started according to the VCD scheme. Hemodialysis (HD) was initiated due to a decrease in eGFR to 8ml/min. Treatment complications included a severe viral infection, worsening debilitating diarrhoea, and candidiasis. The patient refused further specific AL treatment after three VCD courses, replacement therapy with immunoglobulins (IVIG) was started and treatment continued on an outpatient basis with hemodiafiltration (HDF) procedures three times a week and patient's overall condition began to gradually improve, leading to HDF procedures being increased to four times a week.

In November 2022, pregnancy was confirmed. During pregnancy, HD were increased to six times a week. To prevent post-procedural hypophosphatemia, hypocalcemia and hypokalaemia, the patient was switched from HDF to HD with a higher potassium dialysate. The patient did not require enhanced iron and EPO therapy during pregnancy. From the second trimester patient's body weight at the end of each HD procedure was kept 100g higher than at the end of the previous procedure.

In May 2023, a son was born vaginally at 28 weeks of pregnancy 1080g, 37cm, Apgar 7/7/8. After CPAP support in the first days of life, the baby breathed independently without supplemental oxygen and was breastfed. The mother's condition was stable after birth with HD therapy four times a week.

At 1 year of age, the child's development corresponds to their age and mother continues IVIG and HDF therapy.

CONCLUSIONS. Amyloidosis is a rare disease with specific evolving treatments. The patient decided to discontinue specific AL treatment, continued renal replacement therapy and IVIG therapy. This allowed for the patient's stable health and fulfilled her dream of becoming a mother.