


## Images in clinical medicine



## Milky serum during pregnancy

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## Milky serum during pregnancy

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## Image in medicine

A 37-year-old primigravida woman at 40 weeks gestation presented with milky serum during a preoperative evaluation for normal labor. The patient had no history of recurrent abdominal pain, and her previous annual check-ups had shown normal serum lipid and plasma glucose levels. Laboratory tests revealed severe hypertriglyceridemia (5,135 mg/dL), while serum amylase and lipase levels were normal. Additional physical findings showed a puffy face, bradycardia, and goiter, raising suspicion of hypothyroidism due to Hashimoto's thyroiditis, which was confirmed through hormonal and thyroid antibody analysis. After a brief fasting period and initiation of L-thyroxine therapy, her triglyceride levels

significantly decreased to 867 mg/dL. The patient subsequently delivered a healthy baby, and her triglyceride levels normalized postpartum without the need for lipid-lowering medication. Milky or lipemic serum, characterized by a white and creamy appearance, indicates a severe form of hypertriglyceridemia (exceeding 1,000 mg/dL) and should be distinguished from cloudiness caused by bacterial contamination. This condition can lead to serious complications, including acute pancreatitis or hyperviscosity syndrome. Pregnancy and hypothyroidism are well-known exacerbating

factors in individuals with a genetic predisposition to hypertriglyceridemia. Other potential causes include poorly controlled diabetes, alcoholic consumption, nephrotic syndrome, and certain medications. Management involves correcting underlying medical conditions and a comprehensive approach, including supervised fasting or fat-restricted diets, medium-chain triglycerides supplementation, insulin therapy, and triglyceride-lowering medications such as fibrate and omega-3 fatty acids. In severe cases, plasmapheresis should be considered.



**Figure 1:** milky appearance of the blood sample