IMAGES

Strawberry Pink Blood

Jayashree D. Kulkarni¹ · Puneeta Bhatia^{2,3} · Sanjay A. Pai²

Received: 25 May 2016 / Accepted: 7 June 2016 / Published online: 17 June 2016
© Indian Society of Haematology & Transfusion Medicine 2016

Abstract Blood need not always be red. We report a case of a 3 month old boy whose blood was strawberry pink before centrifugation and white (profusely lipemic) after centrifugation. The differential diagnosis was familial hypercholesterolemia or familial combined hyperlipidemia.

Keywords Colour · Hue

A 3 month old boy, born of a non-consanguineous marriage and detected to have hypercholesterolemia and hypertriglyceridemia elsewhere, was referred to our hospital. He had failure to thrive and hepatomegaly. Investigations revealed serum cholesterol of 890 mg/dl, (biological interval 114–203 mg/dl), serum ferritin of 8 ng/ml (50–200 ng/ml) and a hemoglobin of 10.3 g/dl (9.4–13 g/dl). The blood sample was profusely lipemic and appeared strawberry pink before centrifugation (image). Genetic testing and lipid fractions could not be performed. Our differential diagnosis was familial hypercholesterolemia (FH) or familial combined hyperlipidemia (FCHL).

FCHL is the most common primary lipid disorder and occurs in 1 in 200 people. It is an autosomal dominant condition with moderate elevation of triglycerides and LDL-cholesterol and reduced HDL-cholesterol. However, FH could be not ruled out because any person below 18 years with serum cholesterol of more than 270 mg/dl has an 88 % chance of having FH. FH is caused by a primary genetic defect in the LDL receptor gene which reduces LDL binding. Most patients have hypercholesterolemia at birth, increased plasma LDL and deposition of cholesterol in the skin, tendons and arteries.

A white serum sample after centrifugation is not uncommon but it is rare to see extraordinarily pink whole blood before centrifugation.

✉ Jayashree D. Kulkarni
jayashreedk@gmail.com

¹ Department of Pathology and Laboratory Medicine,
Columbia Asia Referral Hospital, Yeshwanthpur, Bangalore,
Karnataka 560055, India

² Department of Pathology and Laboratory Medicine,
Columbia Asia Referral Hospital, Yeshwanthpur, Bangalore,
India

³ Present Address: Cryobanks International India Pvt Ltd,
129, Pace City 1, Sector 37, Gurgaon, India

Compliance with Ethical Standards

Conflict of interest Dr. Jayashree D. Kulkarni, Dr. Puneeta Bhatia, Dr. Sanjay A. Pai declares that she/he has no conflict of interest.

Ethical Approval Institutional review board permission was taken. All procedures performed in studies involving human participants

were in accordance with the ethical standards of the research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Not applicable.