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# Unconjugated hyperbilirubinemia in a blood donor: Chance finding due to unusual plasma discoloration

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In a blood bank, the quality control of plasma is done by various semiautomated and automated instruments. However, with increasing automation, the art of manual visual inspection is slowly getting lost. In this communication, we describe how visual inspection is still useful and provides important information.

We received a blood donation from a 29-year-old repeat voluntary male donor, donating first time at our center. He gave a history of jaundice 3 years back with no known cause of jaundice but presently healthy. His hemoglobin was 17.1 by Hemocue 301 analyzer. Since he met the criteria for blood donation,<sup>[1-3]</sup> we accepted the donor. At our center, visual inspection of components is a routine protocol. After donation, while preparation of components, the unusual yellow color in the segments and plasma bag was noted [Figure 1] as compared to another normal unit [Figure 2].

The donor was negative for viral markers. We quarantined all components and donor was called for further evaluation. Upon subsequent examination and investigation, the bilirubin was 5.01 mg/dl and direct bilirubin was 1.5 mg/dl, and rest of the investigations including complete blood count with peripheral smear, liver enzymes, serum lactate dehydrogenase, serum creatinine, and serum erythropoietin were within normal range. The donor was referred to the gastroenterologist to evaluate for the cause of unconjugated hyperbilirubinemia and was clinically diagnosed as Gilbert's syndrome.

The color of plasma is often a subject of debate. The green color of plasma is commonly mentioned in literature and its significance is often associated with birth control pills.<sup>[4]</sup>

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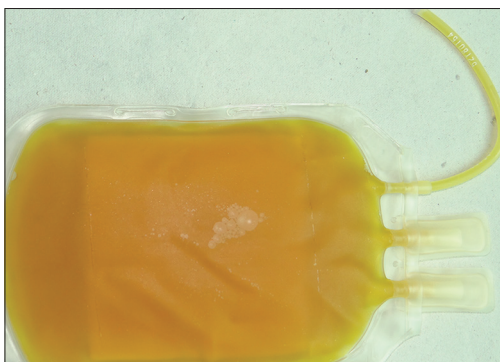


Figure 1: Photograph of the plasma unit showing abnormal yellow color

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Figure 2: Photograph of the plasma unit showing normal yellow color

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The abnormalities in colors were also mentioned in a study by Sood *et al.*, in which the 0.23% donation showed discoloration and total bilirubin of all the 5 units with yellowish plasma ranged from 1.6 to 2.3 mg/dl.<sup>[5]</sup> This high bilirubin might be an indirect marker of a number of diseases in donors. The total bilirubin found in our case was 5.01 mg/dl and the donor was clinically diagnosed as Gilbert's syndrome for which he was unaware of. Thus, a simple visual inspection led to benefit the donor by identifying his disease. The color of plasma may be the first sign for further bilirubin testing. Therefore, we recommend that visual inspection of plasma should be done carefully and conscientiously and any donor with such types of abnormality should be investigated for his health benefit.

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### Conflicts of interest

There are no conflicts of interest.

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