

## Letter to Editor

# Dimorphic anemia and cytopenias

Dear Editor,

We read with great interest the article "Clinico-hematological profile of patients with peripheral blood cytopenias in clinical practice" by Thakur *et al.*<sup>[1]</sup> The most common cause of cytopenias in their study was infections followed by megaloblastic anemia reflecting the high prevalence of infections and nutritional deficiency in the developing countries. Megaloblastic anemia is the most common cause of pancytopenia in their study as well as from other studies from the region.<sup>[1,2]</sup> Another common nutritional cause of cytopenias is dimorphic anemia.<sup>[2]</sup> Raphael *et al.* reported 8.75% of cases of dimorphic anemia presenting with pancytopenia and Garg *et al.* reported 9.55% of cases presenting with pancytopenia.<sup>[2,3]</sup> Dimorphic anemia presenting with bicytopenia was as high as 50.5% in the series by Garg *et al.*<sup>[3]</sup>

Dimorphic anemia, morphologically characterized by two cell populations, strongly suggests a dual deficiency of iron and Vitamin B12/folate.<sup>[3]</sup> Another important cause of dimorphic anemia is the unmasking of an iron deficiency following the treatment of megaloblastic anemia. Although the deficiency of Vitamin B12/folate is responsible for cytopenias, dimorphic anemia should be recognized distinct from that of megaloblastic anemia. The response may not be effective if only Vitamin B12/folate deficiency is treated.<sup>[3]</sup> Nutritional anemia, which is an important cause of dimorphic anemia, is a significant problem in the Indian subcontinent. However, dimorphic anemia, which contributes to a significant chunk of cytopenias, is an undermined entity.

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### Conflicts of interest

There are no conflicts of interest.

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