

Mini-exam: a.Fe-deficiency; b.Fe-distribution disorder; c. Fe-accumulation

	Case 1 F, 30yr	Case 2 M, 60yr	Case 3 F, 65yr	Case 4 M, 45yr	Case 5 F, 4yr	Case 6 M, 18yr	Reference values (red = not standard.)
CRP	< 5	45	<5	8	< 5	< 5	< 5 mg/L
Ferr.	15	103	1700	950	25	2700	Men: 30-300 µg/L Wom.: 20-200 µg/L
TSAT	10	10	94	21	3	101	15-45 %
Hepc.	<0.5	13.2	4.2	9.4	3.1	4.3	< 0.5 -14.7 nmol/L
sTfR	2.60	0.90	0.90	0.90	2.80	6.90	0.76-1.76 mg/L
ZnPP	89	81	39	75	103	95	< 40-80 mmol/mol heme
MCH	1.65	2.00	2.15	2.00	1.20	np	1.67-2.11 fmol
RetHb	1.55	2.12	2.25	2.12	1.29	np	1.87-2.23 fmol

Answers mini-exam

1. a. Fe-deficiency due to extensive blood loss (hypermenorroe)
2. b. Fe-distribution disorder due to inflammation/infection
3. c. Fe-distribution disorder with parenchymal iron accumulation in hereditary hemochromatosis
4. b. Fe-distribution disorder due in the presence of the metabolic syndrome
5. b. Fe-distribution disorder due to a defect in Tmprss6 gene (IRIDA)
6. c. Fe-distribution disorder caused by ineffective erythropoiesis (β thal intermedia)

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