

Title

Severe Hypetransaminasemia in critically malnourished adolescent with anorexia nervosa

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Background and aims

Hypetransaminasemia is a multifactorial complication in Anorexia Nervosa (AN). There are few cases reporting values >200 UI/L (1).

Case presentation

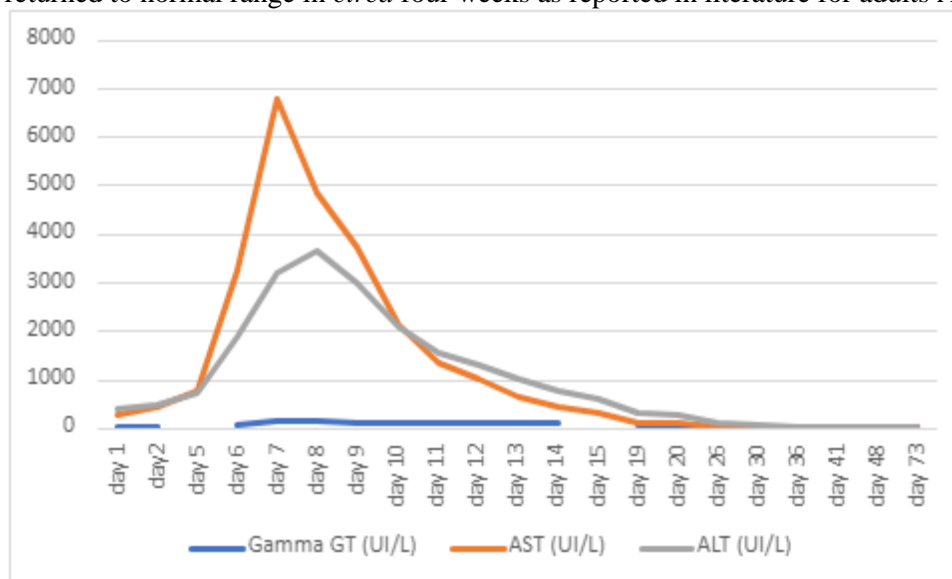
The girl is 15-year-old suffering from AN by the age of 10. From 2016 to 2020 she attempted treatments in clinical settings.

She was admitted in hospital with BMI of 9,95 kg/m² (19,5 kg, 140 cm), hypetransaminasemia (picture 1), no hypoglycemia (tab 1) and no bradycardia.

Nutrition rehabilitation was started with 5 kcal/kg/die via naso-gastric-tube and vitamins EV, as indicated in guidelines. Serum levels showed a progressive worsening (picture 1, tab 1). We maintained low-caloric infusion, hydro-electrolite balance and glucose EV. Glycemia and electrolyte got to normal levels in ten days; transaminasemia require 35-40 days. Despite nutrition support, patient's weight continued to fall. After serum levels' normalization, we gradually increase nutritional support to start weight gain.

Conclusions

Serum levels returned to normal range in *circa* four weeks as reported in literature for adults AN patient (1).



Picture 1. Hepatic serum levels' trend

	day 1	day 5	day 7	day 13	day 36	day 48	day 73
Weight (kg)	19,5	18,6	18,5	16,5	20,6	22,2	24,2
BMI (kg/m ²)	9,95	9,49	9,44	8,42	10,51	11,33	12,35
P (mg/dL)	4,1	2,7	2,7	2,1	3,8	3,6	3,7
Glycemia (mg/dL)	73	33	79	84	75	77	91
Creatinine (mg/dL)	1,34	0,67	0,7	0,31	0,23	0,37	0,45

Tab 1. Trend of anthropometric values and biochemical serum levels.

1. Hanachi M et al. Hypertransaminasemia in severely malnourished adult anorexia nervosa patients: Risk factors and evolution under enteral nutrition. Clinical Nutrition:2013;391-395