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Increased Alpha-2-Macroglobulin in Opiate Addicts: Further Evidence of an Alteration in the Coagulation System due to Opiate Addiction

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- Increased plasma levels of α_2 -macroglobulin, a natural inhibitor of blood coagulation, have been reported in diabetes [1]. We have previously reported that opiate addicts behave similarly to diabetics [2–4]. Therefore, we measured blood glucose, Hb A_{1c} and α_2 -macroglobulin in 20 male addicts (mean age $\pm$ SD 23 $\pm$ 3.4 years) and in 20 healthy male controls (age 23 $\pm$ 2.5 years). Hb A_{1c} and α_2 -macroglobulin were found to be significantly increased in addicts (Hb A_{1c} 7.2 $\pm$ 0.14%; α_2 -macroglobulin 243.26 $\pm$ 62.2 mg/dl) versus controls (Hb A_{1c} 6.3 $\pm$ 0.17%, $p < 0.001$; α_2 -macroglobulin 156.91 $\pm$ 37.32 mg/dl, $p < 0.001$). No correlation was found between Hb A_{1c} and α_2 -macroglobulin levels. Our data demonstrate increased α_2 -macroglobulin levels in opiate addicts and confirm the occurrence of an impairment of the blood clotting mechanism in the same addicts [5–7], in analogy to that found in diabetics [8–10].
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