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## SPONTANEOUS *IN VITRO* CONVERSION OF VARIOUS PHENOTYPE FORMS OF FACTOR B

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**Objective:** Several phenotype variants of factor B (FB) can be identified in human serum. We have previously shown that there are differences in concentration and activity of various phenotypes FB. It was also observed that during serum storage a slow conversion rate between FB phenotypes is accelerated at 37. The purpose of this work is to determine the difference of conversion rate between different FB phenotype variants.

**Methodology:** 107 serum samples of healthy individuals were investigated. Electrophoresis with immuno fixation was used for phenotyping. Activity of FB was determined using the kinetic, nephelometric test with FB deficient serum. RID and electro immuno assay were used for determination of FB concentration. C3 component conversion was investigated by cross- electrophoresis.

**Results:** In analyzed samples 60 SS, 43 FS, 3 FF and one F1S phenotype was found. Three serum samples of each phenotype were stored at 37°C. After 24 h, 3 and 7 days in each sample FB concentration and activity and complement alternative pathway activity were determined. During conversion it was noticed that complement activity was lost on the 7th day, while FB activity remained unchanged. Using cross-electrophoresis we found that on 7th day, C3 component was completely converted leading to the loss of complement hemolytic activity.

**Conclusion:** Phenotype FF had the fastest conversion rate, FS phenotype slower and the slowest conversion rate had SS phenotype. The differences were most obvious on the third day of conversion. Various FB phenotypes had no influence on C3 component conversion.

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