Carcinomas can have influence on the coagulation system by different factors. Locally pathological changes of metabolism, neo-vascularisation, oxygenation and tissue pressure as well as locally and systemically activities of the tumor cells, are part of it. The coagulation situation in patients with head and neck carcinomata is characterized only insufficiently till now. In a prospective pilot study 20 male patients with squamous-cell carcinomas of the head and neck area were subjected to a detailed coagulation diagnostics pre and post therapeutically and, age and sex corrected, compared with a control group (n=37). For the routine parameters PTT, Quick, TZ and INR no differences between the groups could be recognized. For the tumour patients a statistically significant increase arose for the acute phase proteins like factor I (fibrinogen), factor VIII, factor IX, von-Willebrand antigen and activity before therapy. Increased values were found also for plasmin, factor II, factor V and the thrombin-antithrombin-III-complex (TAT) whereas the values for antithrombin-III were degraded significantly. In the tumour patients the pre-therapeutical increased values for the activation marker TAT brought themselves back to normal after the tumour ablative therapy. TAT could be suitable as a potential tumour marker but also for relapse tumours. To evidence this, a study of longer
duration and with a larger number of patients is necessary.