months (range, 1.6 to 31.2 months). There was no correlation between survival and radiotherapy dose, sex, pretreatment WHO performance status and tumor localization.

Our results confirm poor prognosis in glioblastoma multiforme. New more effective therapeutic approaches are sorely needed in this tumour.

ANALYSIS OF MUTATIONS IN TUMOUR SUPRESSOR GENE P53 IN BREAST CANCER PATIENTS FROM POZNAN AREA

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The p53 is transcriptional factor that enhances the rate of transcription of six or seven known genes which play important role in cell cycle regulation. The human p53 protein contains 393 amino acids and has been divided structurally and functionally into four domains. The p53 gene and its protein product have been studied since it became clear that slightly more than 50% of human cancers contain mutations in this gene. A study of mutational spectrum at the p53 gene are localized predominantly in the DNA-binding domain of the protein (exons 4-9). The nature of this changes is most commonly a missense mutation in one allele followed by a reduction to homozygosity, producing a faulty protein. Deletions or chain termination mutations are more rarely.

Mutations in p53 gene have been also found in breast cancer in 30-40% of cases. Kind of these mutations suggest that enviromental mutagens may play important role in arising of this type of cancer.It is observed that in West Poland breast cancer occures more frequently then in other areas of the country; the highest numbers of cases are found in GreatPoland still now for unknown reasons. In this work 48 cases of breast cancer were studied. 12 different mutations in p53 were found. This mutations were then compared with datebase catalogs containing mutations in p53. Only 3 from 12 found mutations are the same as reported in datebase. Nine of them were not observed before what may suggest that specific mutational spectrum in patients with breast cancer from GreatPoland exists. Futher studies involving greater number of cases are needed to confirm this observation.

IS ACUTE MUCOSITIS DOSE LIMITING FOR ALTERED FRACTIONATED RADIOTHERAPY ?

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There is now a substantial number of studies on radiotherapy for head and neck cancer using altered fractionation schedules.

Accumulated dose/week (AD) vs incidence and severity of acute mucositis

In conventional radiotherapy given in 1.6-2.0 Gy fractions up to total dose of about 70 Gy, confluent mucositis (CM) is generally reached at day 22. The threshold for the CM appears to be around 20 Gy and the CM usually develops about 9 days after delivering that dose. However, some studies suggest that the onset of CM may depend on accumulated dose/week and the larger AD is the sooner CM is reached.All these observations suggest that the intensity of acute epithelial reactions, and likely other H-type-like tissues reflects the balance between the rate of cell killing by irradiation and the rate of regeneration of surviving stem cells. Once a critical level of survival cells has been attained, a certain type of clinical damage will develop at a rate only determined by the cellular kinetics of the tissue. When a peak in the CM is reached, further stem cell killing can not produce an increase in intensity of acute reactions, but could be manifest as prolonged time to heal the reactions.