Findings. The sensitivity of PET/CT in the identification of the site of the primary tumour was 92.85% and the specificity was 41.17%. Sensitivity was 0% and specificity was 68.62% for imaging, and 100% and 78.43%, respectively, for panendoscopy.

Interpretation. PET/CT is more sensitive for detection of the occult primary tumour. It has a low specificity rate and a high false-positivity rate. For this reason, several biopsies from suspected primary tumour sites should be taken rather than solely relying on PET/CT. The amount of uptake of contrast on PET/CT (intensely positive areas) correlates better with the positive results of panendoscopy and biopsy. PET/CT-guided fine needle aspiration cytology should be used more frequently.

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AOS22 EXPRESSION OF EXCISION REPAIR CROSS COMPLEMENTATION GROUP 1 (ERCC1) PROTEIN IN INDONESIAN PATIENTS WITH NASOPHARYNGEAL CARCINOMA RECEIVING CISPLATIN-BASED ADJUVANT CHEMOTHERAPY

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Background. Overexpression of excision repair cross complementation group 1 (ERCC1) has been reported to be associated with resistance to platinum-based chemotherapy in head and neck cancer. Since cisplatin-based adjuvant chemoradiotherapy is the standard treatment for nasopharyngeal cancer (NPC) in Indonesia, it is important to investigate the role of ERCC1 as a possible predictive marker of disease progression in our patients.

Methods. Consecutive samples obtained from our pathology archives of NPC from 31 patients who were receiving standard treatment with cisplatin-based chemoradiotherapy were examined for ERCC1 expression by use of immunohistochemistry. A retrospective cohort study was done and overall survival curves (OS) were plotted versus expression of ERCC1.

Findings. ERCC1 expression was high in 16 (51.6%) patients and low in 15 (48.4%). There were no differences in the baseline characteristics between the two groups (age, sex, and stage of the disease; $p > 0.05$). Median survival was 15.5 months. Analysis of OS showed a significant difference between the two groups ($p = 0.02$). A univariate analysis of the baseline characteristics and ERCC1 in relation to the 1 year OS showed that only ERCC1 was significant. 53.3% (95% confidence interval (CI) 40.4–66.2) of patients in the group with high ERCC1 expression had an OS of 1 year or more, whereas 80% (95% CI 69.7–90.3; $p = 0.02$) of the group with low ERCC1 expression had an OS of 1 year or more. The median 1 year OS in the high ERCC-1 group was 13.2 months (95% CI 0.0–27.2), whereas it was not achievable in the low ERCC-1 group. Hazard ratio for the group with high expression of ERCC1 was 3.304 (95% CI 1.12–9.71).

Interpretation. The low expression of ERCC1 might prolong the overall survival in Indonesian patients with NPC who are receiving standard cisplatin-based chemoradiotherapy.

The authors declared no conflicts of interest.

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AOS23 O6-METHYLGUANINE-DNA-METHYLTRANSFERASE EXPRESSION IN THAI PATIENTS WITH MALIGNANT GLIOMAS: OUTCOME AND RESPONSE TO TREATMENT IN RAMATHIBODI HOSPITAL

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Background. Malignant glioma is a rare but fatal tumour. High expression of O6-methylguanine-DNA-methyltransferase (MGMT) has been linked to poor outcome. We investigated the frequency of MGMT expression and its correlation with outcome and response to treatment in Thai patients.

Methods. In a retrospective cohort study of adult patients with histologically confirmed WHO grade III and IV malignant glioma diagnosed at Ramathibodi Hospital between January 1997 and December 2009, tumour tissue was assayed for MGMT immunohistochemistry status using MT 3.1 antibody with normal brain as the internal control. Data for clinical characteristics, treatment details, and outcome were collected. The main objective was the frequency of MGMT overexpression. Secondary outcomes were the correlation of MGMT expression with survival and treatment response.

Findings. One hundred thirty-five patients were eligible for analysis. The median age was 47 years. The most common histology was glioblastoma multiforme (WHO grade IV, 54.8%). Only 97 specimens were available for MGMT analysis and overexpression was detected in 31%. Median overall survival (OS) was 11.9 months and 1-year, 2-year, and 5-year OS was 50% (95% confidence interval (CI), 0.41–0.58), 34% (95% CI, 0.26–0.42), and 21% (95% CI, 0.14–0.29), respectively. Four significant adverse prognostic factors for survival that were identified in a multivariate analysis were diabetes mellitus, neurological deficit at diagnosis, histology of glioblastoma multiforme, and receipt of only single treatment modality. MGMT expression did not have prognostic value in the univariate and multivariate analyses. There was no difference in overall survival or response to treatment with temozolamide/BCNU in the subgroup with low MGMT compared with high MGMT.

Interpretation. The prevalence of MGMT expression in Thai patients with malignant glioma was not different from that reported elsewhere. MGMT expression did not affect outcome in this study cohort. Therefore, considering MGMT as a relevant factor in selection for treatment with temozolamide might be premature.

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AOS24 CANCER PHYSICIANS' ATTITUDES TOWARDS CANCER TREATMENT IN GERIATRIC PATIENTS IN SINGAPORE

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