Impact of multidisciplinary tumor boards on diagnosis and treatment of esophageal cancer

Abstract:

Background: This paper describes the design and operation of a daily intradisciplinary tumor board in a university hospital setting. The results focus on patients with esophageal cancer. Methods: A daily tumor board was established using a central database and web technology. Disease management teams defined treatment guidelines and TNM-stages, treatment concepts and perioperative risk as well as prospectively evaluated psycho oncological stress factors. Furthermore, we studied compliance between board decisions and post-conference treatment as well as the question of how the expert's opinion modified the initial treatment plans. Results: Between 9/1999 and 6/2006, 6076 patients (900/year, 64% male, median age 62 yrs) were entered into the cancer center database. 1238 patients (20.4%) presented with esophageal cancer and 1212 with gastric cancer (19.9%). Curative intention upon registration of patient to conference was generally high, but highest in patients with adenocarcinoma (AEG, 79.2%) and lowest in cervical squamous cell (SCC) carcinoma (67.5%). Overall, non-advanced cancers can be expected to appear before our institution's tumor board only in around 18.5% of all cases. The evaluation of the perioperative risk scores derived from the database show lower scores for AEG-compared to SCC groups. The mean body mass index differed significantly between SCC (24.0) and AEG (27.0). The highest psychological...
stress and, consequently, need for intervention may be expected in groups cervical SCC, AEG and gastric cancer. Neoadjuvant treatments increased sharply during the observation period. Tumor board decisions can be expected to be put into practice in more than 95% of the cases. Even in a trained center, the pre-conference treatment concept is rejected in up to 15% and modified in up to 21% of the cases. Conclusions: A daily tumor board is feasible and very useful in a high volume center. There is considerable benefit for patients with esophageal cancer. Neoadjuvant treatments are promoted. Lessons to be learned and recommendations as a result of our daily practice are given.