

The Impact of Departmental Quality Assurance Rounds in Radiation Oncology Practice on Patient Management Plan: Single Institution Experience

Jamal Saleh Khader (King Hussein Cancer Center, Jordan), A. Al-Mousa (King Hussein Cancer Center, Jordan), I. Mohammed (King Hussein Cancer Center, Jordan), S. Al Khateeb (King Hussein Cancer Center, Jordan), A. Al Nsoor (King Hussein Cancer Center, Jordan), W. Al Asha (King Hussein Cancer Center, Jordan), R. Abu Hijlih (King Hussein Cancer Center, Jordan), F. Abu Hijlih (King Hussein Cancer Center, Jordan)

BACKGROUND : Quality assurance (QA) rounds represent an important check point for the patient radiotherapy plan.

HYPOTHESIS: This study focused on understanding and reporting the variables which modified the radiotherapy treatment plan before the commencement of treatment.

METHODS: We reviewed all patients who were discussed at our departmental QA rounds which were held twice or trice a week from January 2007 till the end of December 2014. The quality assurance process was divided into three categories: approved, minor modifications and major modifications for radiotherapy treatment plans. Major modifications were considered as any substantial change for the treatment dose, target volume or intent of treatment which required patient re-simulation or treatment re-planning. Minor modifications included trivial treatment plan change which does not require re-planning for the whole treatment. Some rare or difficult cases were also presented for discussion to decide management plan.

RESULTS: A total of 7043 radiotherapy treatment plans for different anatomical sites were reviewed at our departmental QA rounds. From these treatment plans 6265 (89%) were approved, 469 (7%) needed modification, of which major modifications 327 treatment plans were done and minor modifications 142 treatment plans were done. 309 cases were reviewed for further discussion. Therefore, Quality assurance rounds provide a significant influence for radiotherapy treatment plans, through identification of potential adjustments which has a positive impact on patients care; it also helps in improving the radiotherapy plan & delivery process and directs future strategy for assuring high quality measures especially for developing countries. Moreover the rounds serve a unique opportunity for the departmental faculty to discuss some rare or difficult cases and decide management plan and patient care.