Special Physics Consult

Policy:
To ensure that the Division of Radiation Oncology's policy and procedures concerning provision of consulting services meet the organization's standards. The Medical Physicist shall accept all requests to perform a special physics consultation. Gamma Knife and Total Body Irradiation cases, TBI treatment procedures, IMRT, HDR, and any other clinical procedure, which requires highly skilled physics evaluations or participation in clinical procedures.

Procedures:

1. Gamma Knife cases required a Special Physics Consultation prior to every clinical procedures. This special physics consultation includes quality control check for equipment, direct communication with Neurosurgeons and Radiation Oncologist regarding treatment planning and dose specifications, and hands on assistance with treatment procedures. This is a standing order for all Gamma Knife clinical procedures.

2. Total Body Irradiation requires a Special Physics Consultation on the day of simulation. TBI simulations are clinical set-ups, which requires extensive measurements of source to skin distances, thicknesses of patient’s anatomy, positioning techniques, and dose evaluation using TLD or ionization chamber measurements. The physicist will participate with the above clinical procedures. This is a standing order for TBI simulation and clinical treatments.

3. IMRT requires a Special Physics Consultation will be charged along with first day treatment charges. It includes a dose map QA comparison between the computer treatment plan and actual machine delivery was made using Sun Nuclear, Inc. Map Check System. The results are included in the patient chart. The physics consultation also includes the checking of the MU Check calculations before the treatment and the weekly chart check.

4. HDR requires a Special Physics Consultation that will be charged along with first day treatment charges. The physicist is required to be present for the duration of the HDR procedure. Brachycheck will be used in the HDR calculation.

5. Other procedures, which may require a special physics consult, may include radiation dose evaluation to a fetus, assisting with surgical procedures, and any clinical procedures which requires hands on participation of a medical physicist.
6. Physicist must provide consult documentation and will be maintained in the treatment chart.

Written: 2000
Reviewed: 2003, 2012
Revised: 2006, 07, 2008