



Fig. 3. Gamma knife treatment room.⁸ Photo: © Brian Dressler.

ports 4 helmets and all the plugs used in adjusting the emission of the gamma rays for the treatment. During treatment, communication with the patient is by microphone and video camera (Fig. 3).

In the vinyl composite tile floor pattern are angled lines that indicate the emission pattern of the gamma radiation when the unit is in operation. This abrupt change in color provides a visual boundary, informing staff in an emergency where the highest concentrations of gamma radiation may have occurred.

Fluorescent perimeter lights around the space provide general illumination for the treatment room. This keeps the light out of patients' eyes as they are lying on their back for the treatment. Task lights, used when the helmet is changed on the unit and when a patient's frame is attached to the helmet, are provided by several dimmable incandescent lights mounted in a gypsum board barrel vault centered over the gamma knife unit. As a patient's treatment may last from 15 min to over an hour, the barrel vault provides visual relief from the typical flat ceilings of treatment spaces.

The most difficult part of the project was to provide for accommodation of the gamma knife unit's loader in 7 years when it becomes necessary to change the cobalt-60 radioactive source. The best solution seemed to be to provide a roof hatch in the center through which the loader could be lowered and then lifted out once the task was complete. To capitalize on the fact that we had to provide a hole in the roof of the

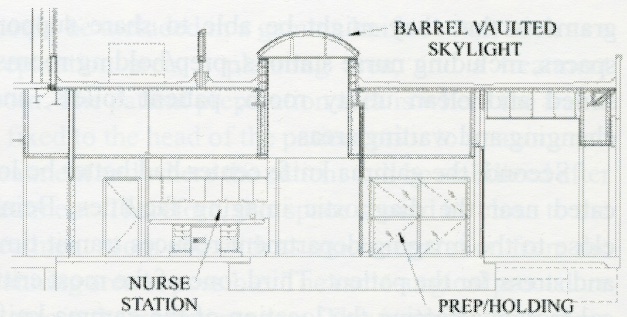


Fig. 4. Building section through the vaulted removable skylight.⁸ Photo: © Brian Dressler.

suite, it was decided to enclose the opening with a removable barrel-vaulted skylight that would bring warm, dynamic daylight into the very heart of the suite (Fig. 4).

The skylight and shaft were sized to accommodate the gamma knife loader when reloading becomes necessary. The great depth of the well minimizes the amount of direct sunlight that strikes surfaces within the center, creating a warm, soothing glow of indirect sunlight that bathes the floor in front of the treatment room and cascades gently at the front of the nurse station. When a patient's procedure is concluded, and he/she turns to exit the treatment room, he/she sees daylight pouring in from the skylight just beyond the door, drawing him/her out into the warmth of natural light. This helps make the gamma knife center a healing environment.

CREATING PATIENT-CENTERED CARE ENVIRONMENTS

Design Concepts

In recent years, concepts of patient-centered care have greatly influenced the interior design of healthcare facilities. There are some examples presented below (Figs. 5-9).

1. A lobby is filled with natural light and is furnished like a living room at home.
2. Decentralized nurse stations containing patient linens and other supplies are located outside each patient room. This allows the staff to remain closer to patients and eliminates the chatting and