

Israeli Hospital 'Knows No Borders' When Treating Patients

Not unexpectedly, southern Israel suffered more than other areas of the Jewish state during this summer's conflict with Hamas. Yet up in northern Israel, 30 doctors from the Haifa-based Rambam Health Care Campus (RHCC) were drafted into the Israel Defense Forces (IDF).

"Israel is a small country, so everything affects you whether you are in the conflict or not," Prof. Rafael (Rafi) Beyar, a renowned cardiologist and director general of RHCC, told .

Now, in the aftermath of the 50-day summer war, RHCC is proving that medicine has "no borders," in Beyar's words. This week, doctors at the hospital conducted a successful kidney transplant on a 14-year-old boy from Gaza.

The largest hospital in northern Israel, RHCC serves more than 2 million residents and functions as the primary medical facility for the Northern Command of the IDF. In addition to treating Gazan patients and training Palestinian physicians, the hospital is receiving wounded Syrian refugees.

Many of RHCC's Gazan patients are children facing cancer and kidney diseases.

"These kids don't have any other solutions," Beyar said.

While suffering from kidney failure, the Gazan boy treated this week also had a blood condition that obstructed some of his blood vessels. Doctors first needed to check for usable blood vessels, and only then could they transplant his sister's kidney into his body. When it became clear that the boy's functioning blood vessels could not sustain the new

kidney, doctors implanted a synthetic connector that saved his life.

On the Syrian front, RHCC has received nearly 100 wounded refugees over the past few months. IDF soldiers provide emergency treatment for injured refugees at the Israel-Syria border in the Golan Heights and then bring them to the hospital.

Most of the Syrian patients have sustained injuries from shock, bombs and other blasts. When they are treated and recover, most return to Syria, but sometimes they don't want to go back, said Beyar.

Like the patients from Syria, most of the Gazan patients are thankful for the treatment they receive from RHCC. Although Beyar doesn't know what happens to the patients once they return to Gaza, he said, "Someone who is treated and whose life is saved knows how to appreciate that." Bayern added that he believes Israeli medical treatment of Gazans "has a long-term impact" on how Palestinian civilians view Israel.

RHCC's staff and management were tested heavily during the 2006 Lebanon war, when hundreds of rockets rained down on the hospital. Following that war, a planned parking lot was built as a dual-purpose facility capable of converting into a fortified 2,000-bed underground hospital for times of conflict.

Initially funded with a donation from Israeli philanthropist Sammy Ofer, and afterward funded by the Israeli government, the underground hospital opened in June and is currently the world's largest structure of its kind.

The parking garage "has the full capacity to convert to a hospital," Beyar said.

"That means it has all the facilities that a hospital needs, in terms of air conditioning, lights, oxygen, all the medical

gadgets. ... All the infrastructure is already in the walls. That means all the oxygen pipes and connections to the emergency machines. ... So you can roll down the patients, the respirators, the monitors... [and] just install them immediately," he said.

To protect against chemical warfare, the parking garage can be sealed from the outside by special doors, and filters then clean the air in the area.

Several IDF soldiers have been wounded by errant mortar fire from the Syrian civil war, and with its fortified underground hospital, RHCC is prepared in case the war spills farther into Israel.

"We are ready for any such event," Beyar said.

After a drill conducted by RHCC, Beyar estimates that a full evacuation of the hospital to the underground area could take up to 72 hours. But with some preparation, "it only takes one hour" to move about four departments of 30 patients each underground, he said.

Concern over the looming threat of the Syrian conflict has not stopped RHCC from pursuing medical innovations beyond the fortified underground structure. The hospital often collaborates with Technion-Israel Institute of Technology, which also is located in Haifa, and with private companies. Beyar also is known for inventing a robotic-catheterization system that enables physicians to conduct remote surgery.

"You can sit next to the robot and operate the catheterization system, which will actually open up blockages in the [heart's] arteries and implant stents," Beyar said.

The other advantage of the system is that this keeps doctors away from radiation.

"[A doctor] doesn't need to stand by the X-ray machine and

sits in the console,” explained Beyar. The catheterization system has been approved by America’s Food and Drug Administration and “is penetrating the U.S. market,” he added.

Another recent development tested and utilized at RHCC is a focused ultrasound for the brain. Using technology developed by a company called InSightec, doctors “can actually treat your brain with a focused ultrasound beam and treat Parkinson’s [disease],” according to Beyar, who said that to date more than 10 patients have undergone this ultrasound at Rambam “with amazing results.”

“The patients come out of this procedure, which takes two to three hours, and they stop trembling,” he said. “There are no more tremors in their hands. ... [The treatment] holds and [the shaking] doesn’t come back.”

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