UT Southwestern Doctor's Expertise Helped Trapped Chilean Miners During Pressured Half-Mile-Deep Rescue(2)

Bio-Medicine.Org

DALLAS, Oct. 18 /PRNewswire-USNewswire/ -- When rescuers needed to determine how to safely extract Chilean miners without their fainting and suffering a potentially devastating loss of blood to the brain, they turned to a UT Southwestern Medical Center scientist whose expertise typically is focused on astronauts in space, not mine workers trapped underground.

"That all 33 men made it out of the mine without fainting is extraordinary," Dr. Benjamin Levine, professor of internal medicine at UT Southwestern, said of the dramatic rescue that captured worldwide attention. "I'm glad I was able to help."

After being contacted by NASA consultants in September, Dr. Levine, the cardiovascular team leader for the National Space Biomedical Research Institute, and two NASA flight surgeon colleagues created the protocols for the men's safe return to the surface. Communications and a supply line were established with the miners on Aug. 22, but relief shafts of more than 2,000 feet took weeks to dig after the Aug. 5 collapse.

The biggest health concern as the retrieval operation commenced was that men would faint during the long ride to the surface. The rescue capsule wasn't wide enough for a passenger to fall down in, and it was feared that the heart of a miner who had fainted might not be able to pump blood up to the brain. Without oxygen reaching the brain, the miner could die. And the rescue trips, originally estimated to take four hours, wound up lasting less than an hour per individual.

Ultimately, medical-science discoveries earmarked for use in the heavens freed the miners from their earth-bound tomb.

Dr. Levine is the principal investigator of the largest outside grant on the effects of long duration space flight on the cardiovascular system and has done other consulting work for NASA. He has participated in rescue clinics in the high altitudes of Nepal and Alaska.

"Two-thirds of astronauts will faint when standing still after
'/>"/>

SOURCE [1]

Source URL (retrieved on *03/09/2014 - 4:00am*):

http://www.mdtmag.com/news/2010/10/ut-southwestern-doctors-expertise-helped-trapped-chilean-miners-during-pressured-half-mile-deep-rescue2

Links:
[1] http://www.bio-medicine.org/medicine-technology-1/UT-Southwestern-Doctors-Expertise-Helped-Trapped-Chilean-Miners-During-Pressured-Half-Mile-Deep-Rescue-11858-1/