Live Blog on Dr. Baker's Full Sense Device Presentation from 2013 Alpine Experts Meeting 2013-03-12 09:04

Dr. Randal Baker is presenting on his Full-Sense device, an esophageal stent which is implanted endoscopically.

He had a "eureka moment" when he saw a patient who had a number of complications after a gastric bypass, whose pouch would constantly stricture. He placed a stent across the pouch to keep it open. A few weeks later, he found she was losing weight, even though she was now able to eat solids.

He tried to develop a concept which would place constant upwards pressure on the top of the stomach. He created a stent with an esophageal portion and a cardiac function. In an animal study, they saw a 1% total body weight loss per day. The more pressure he placed on the top of the stomach, the more weight they lost. They planned to euthanize the animals at 20% total weight loss, but the animals remained healthy and happy at this point, so they continued the experiment.

In human studies, participants reported that they were only slightly hungry before meals, and were "pleasantly satisfied" after eating. Hunger went away after only a small amount of food.

Over 100 days, a group of 18 patients had an excess body weight loss of 50%. They continued to lose weight as long as the device was in place. After the device is removed, the patient begins to regain weight.

They overcame a number of developmental problems including esophageal spasm and the requirement for fluoroscopic during installation.

The stomach distending is more direct and continuous than traditional methods, says Baker, which requires food in the gastric remnant before satiety is induced. There have been no non-responders to the device. He has found that greater excess body weight loss by the patient leads to less chance for weight regain.