

## **Hyperthermic Intraperitoneal Chemotherapy (HIPEC)**

After a series of meetings, representatives from the major Peritoneal Surface Malignancy Centers from around the world have agreed to no longer use the name of IPHC and use the name that has been used in Europe for many years. Therefore, from hereon, we will use the term HIPEC, Hyperthermic Intraperitoneal Chemotherapy.

Peritoneal Surface Malignancies can be described as tumors from the gastrointestinal or gynecological organs that rupture and then distribute themselves throughout the entire abdominal cavity in a predictable fashion. The most common form of presentation of these peritoneal implants include: Acute appendicitis or peritonitis when the tumors rupture, increasing abdominal girth secondary to ascites and tumor accumulation in the omentum, an ovarian mass, a new onset hernia and sometimes, just plain abdominal pain. These tumors used to be known as Peritoneal Carcinomatosis and were usually associated with a terminal condition with a life expectancy of less than 6 months.

Cytoreductive Surgery and HIPEC (Hyperthermic Intraperitoneal Chemotherapy), represent a comprehensive surgical approach for patients whose tumors are confined to the abdomen and have not spread through the blood stream. The use of peritonectomy procedures allows the surgeon to remove the peritoneal implants; after all resections are done, the abdomen is perfused with chemotherapy that is heated to 42 degrees Celsius (107.6 Fahrenheit) for 90 minutes.

Giving the chemotherapy in the abdomen at the time of surgery allows for greater concentrations of the drug where is needed. Adding heat to this perfusion has a threefold advantage: Heat at 42 degrees Celsius kills cancer cells while not affecting normal cells. Heat makes the killing effect of the chemotherapy more powerful and also softens the tumor nodules so the penetration of the chemotherapy into the tumor nodule is enhanced.