

PAIN IN THE ADVANCED PANCREATIC CARCINOMA: CT - GUIDED CELIAC NEUROLYSIS

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OBJECTIVE:

Since 1995, Computed -Tomography (CT) guided neurolytic celiac plexus block have been used successfully in our Hospital in the treatment of pain in advanced pancreatic carcinoma. We evaluate the technique and its clinical results.

MATERIAL AND METHODS:

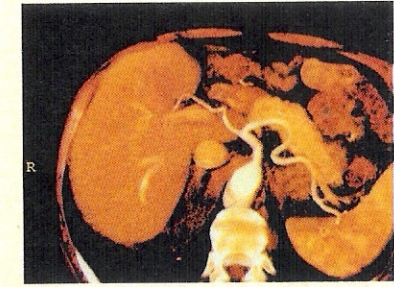
We have studied 18 patients with advanced pancreatic carcinoma (mean age 67 years, 6 females / 12 males). First of all, we diffused an iodinate contrast solution followed by an anaesthetic solution of 20 ml of mepivacaine (2%) mixed with 20 cc of ethanol (100%). In 12 patients we performed the block by an anterior approach. In 6 patients the approach was posterior in order to block the splanchnic nerve. The CT permitted an accurate placement of the needle (20G).

RESULTS:

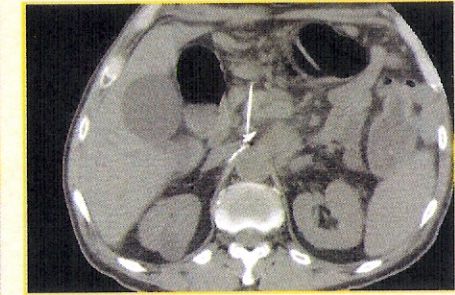
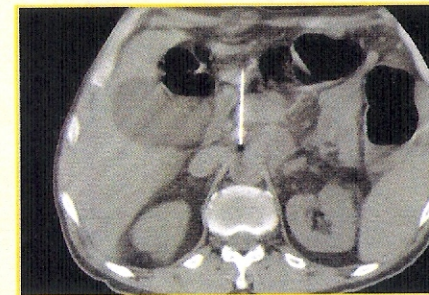
Pain relief was achieved in all the patients. The pain relief was long lasting: patients reported no pain or easy controlled pain during the first 3 months or until death (mean period of two and a half months). One patient reported no pain till his death, 8 months post celiac block. The posterior approach required a bilateral puncture, but it is the best way when the pancreatic mass involves all the vascular structures. There were no associated complications.

CONCLUSIONS:

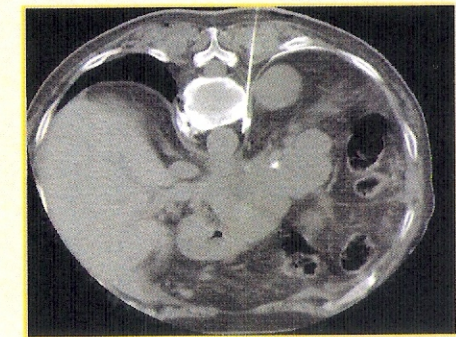
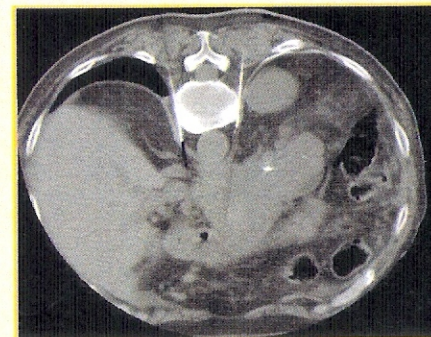
- 1.- The CT guidance allowed accurate needle placement and also showed with precision the spread of the ethanol-anaesthetic solution in the celiac area.
- 2.- CT guided celiac block appears to be a safe and effective technique for the relief for unresponsive pain to conventional medical treatment.



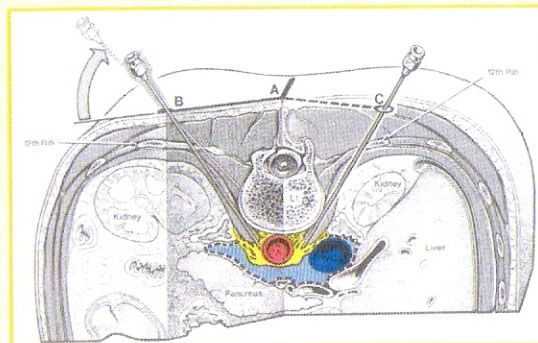
CT multidetector: the axial and sagittal reconstructions shows that the celiac plexus region between the mesenteric and celiac arteries, and slightly right and caudal to the celiac artery



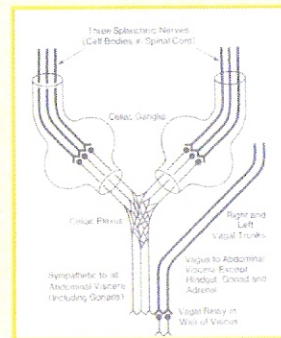
Celiac plexus block by anterior approach. Computed Tomography scan of injection of contrast media during celiac plexus block is a valuable guide to verify -or correct- the right placement of the needle prior to diagnostic or therapeutic.



Posterior celiac plexus block: Needles have been inserted on right and left of the diaphragm, into the retrocrural space, avoiding the costophrenic sinus. Note contrast almost surrounding aorta in a similar distribution to that shown in the figure on the left (light blue colour).



Posterior approach to splanchnic nerves and deep anatomy: retrocrural space (yellow), and the celiac plexus region (blue).



Constituents of celiac plexus