



Present and future of hyperthermic intrathoracic chemotherapy (HITHOC) in thoracic surgical oncology

The idea of this special series was born from the fact that the survival in malignant pleural mesothelioma and advanced thoracic tumors is still dismal. Moreover, patients with such invasive tumors are some of the frailest in Society, not only because of the presence of advanced cancer, but also because the consciousness that such advanced cancers, not amenable to surgery, will give them a humble survival.

With this in mind, it is evident that new ideas are necessary to help these unfortunate patients, and this is the main reason why renowned international surgeons from large academic thoracic centers have been invited to share their experience on the role of hyperthermic intrathoracic chemotherapy (HITHOC) in advanced thoracic tumors. I recall that HITHOC is accomplished in the operating room immediately after a thoracotomy or VATS performed for a debulking operation for an advanced chest tumor (1-5). An important step forward in the safety of the procedure has been recently accomplished as it has been demonstrated that an adequate nephroprotection reduces renal complications after HITHOC (6).

This series of *ATM* makes an important contribution to this subject as patients, surgeons, physicians, oncologists after reading the various articles published in the series will be hugely informed on HITHOC as an adjuvant treatment to cytoreductive surgery of primary and metastatic thoracic cancers such as mesothelioma, M1a-pleural effusion lung cancer, advanced thymomas and metastatic cancers.

In the series I, together with other international colleagues, wrote an article (7) to ask to include HITHOC in the guidelines for malignant pleural mesothelioma (8) as its absence could let some patients and physicians erroneously conclude that the procedure is still investigational despite HITHOC is more than 20 years old (3,7).

In general, all authors of the series agreed for more level of evidence (8) to give HITHOC its place in the decision-making process of advanced malignant chest tumors. It is of particular interest that, confirming previous studies (9-12) HITHOC can prolong the survival in patients with malignant pleural effusion M1a (stage IV) NSCLC. Another strength of this series is that for the first time it has been reported that lung decortication at 42 °C significantly increased the cisplatin concentration in the lung with a penetration depth of 7.5 mm.

Finally, this series is also dedicated to the new generation of surgeons and physicians who should be able in the future to make precision surgical strategies a reality (13), and consequently treat these highly complex patients individually providing them sophisticated treatments such as debulking surgery and HITHOC with the best management outcomes.

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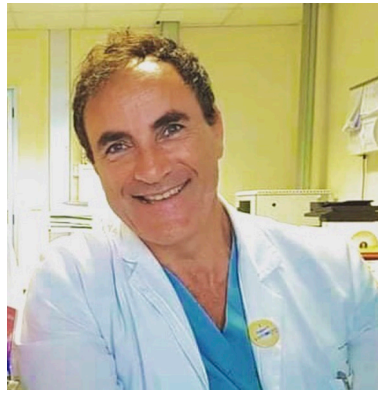
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