

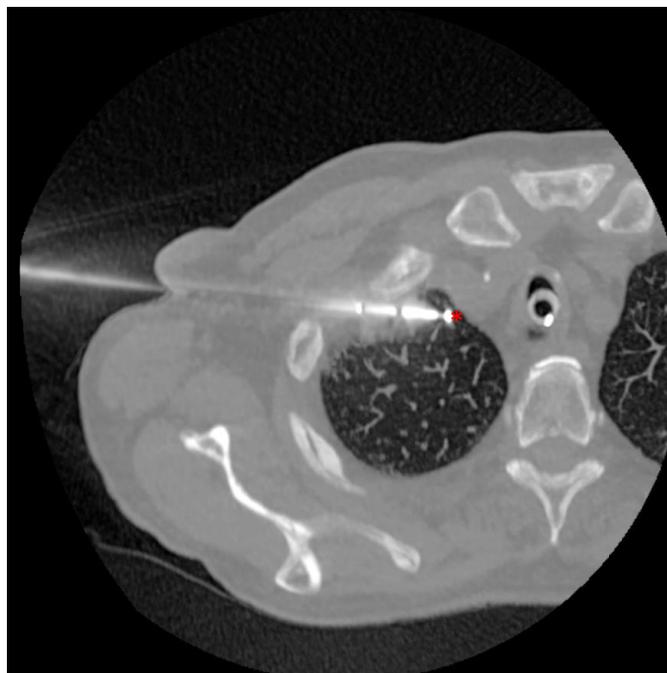
## Lung cryoablation close to the mediastinum

### Procedural Information

Date of procedure: May 2018  
Location: Strasbourg, France  
Hospital: University Hospital of Strasbourg  
Physician: Julien Garnon, MD

### Case Description

75 y.o man referred for the management of a post SBRT recurrence of a lung carcinoma. The lesion was located close to the mediastinum and especially the phrenic nerve. Cryoablation was planned with 3 probes. Additional CO2 injection in the pleura was also planned in order to insulate the phrenic nerve from the iceball.

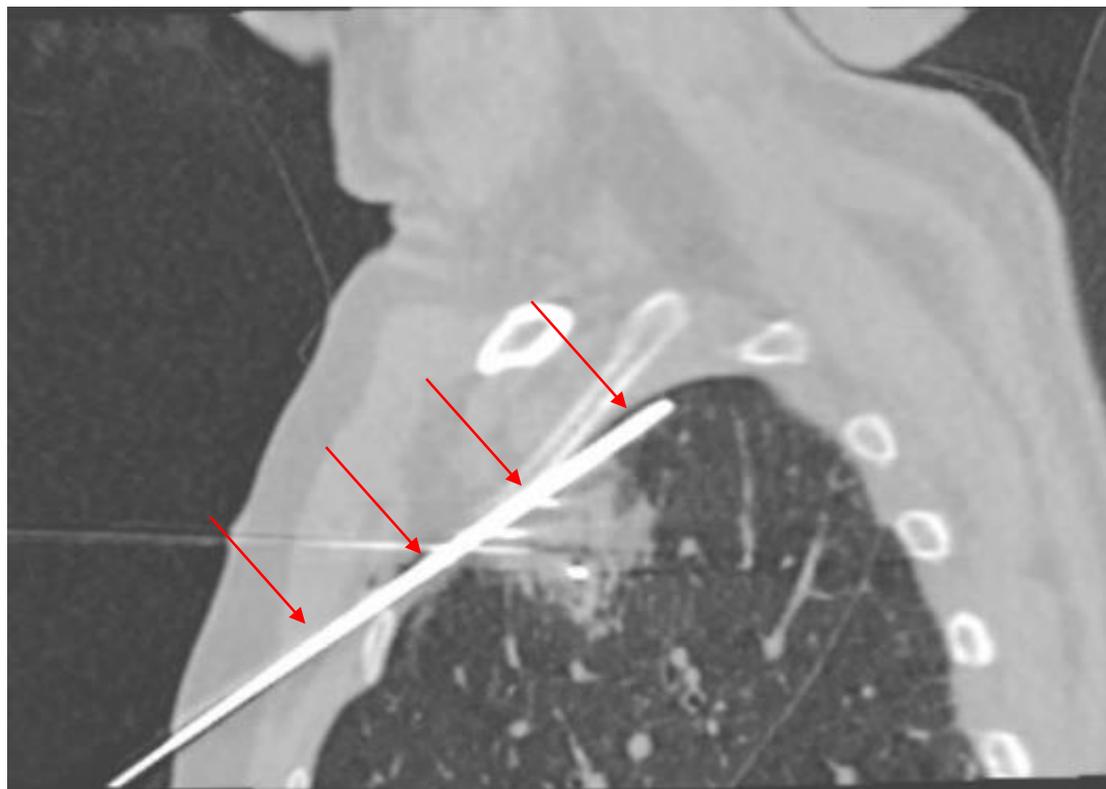


Axial Ct scan showing cryoprobe #1 in position within the tumor. The phrenic nerve (asterisk) is close to the expected ablation zone.



Axial Ct scan (more caudal than left image) showing cryoprobe #2 (probe#3 not shown) in position within the tumor. The phrenic nerve (asterisk) is still close to the expected ablation zone.

## Lung cryoablation close to the mediastinum

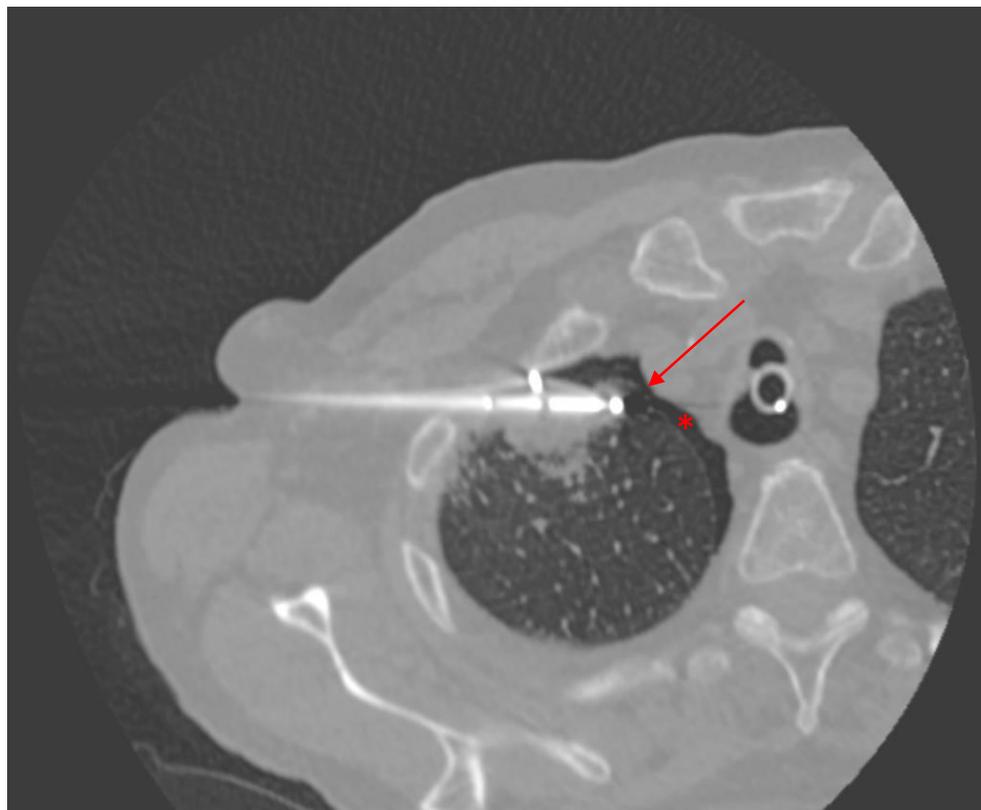


A 17G 17cm long Gangi-HydroGuard<sup>®</sup> (arrows) needle was advanced. The spring loaded blunt tip helps to penetrate precisely the pleural space, and then to advance safely within it.

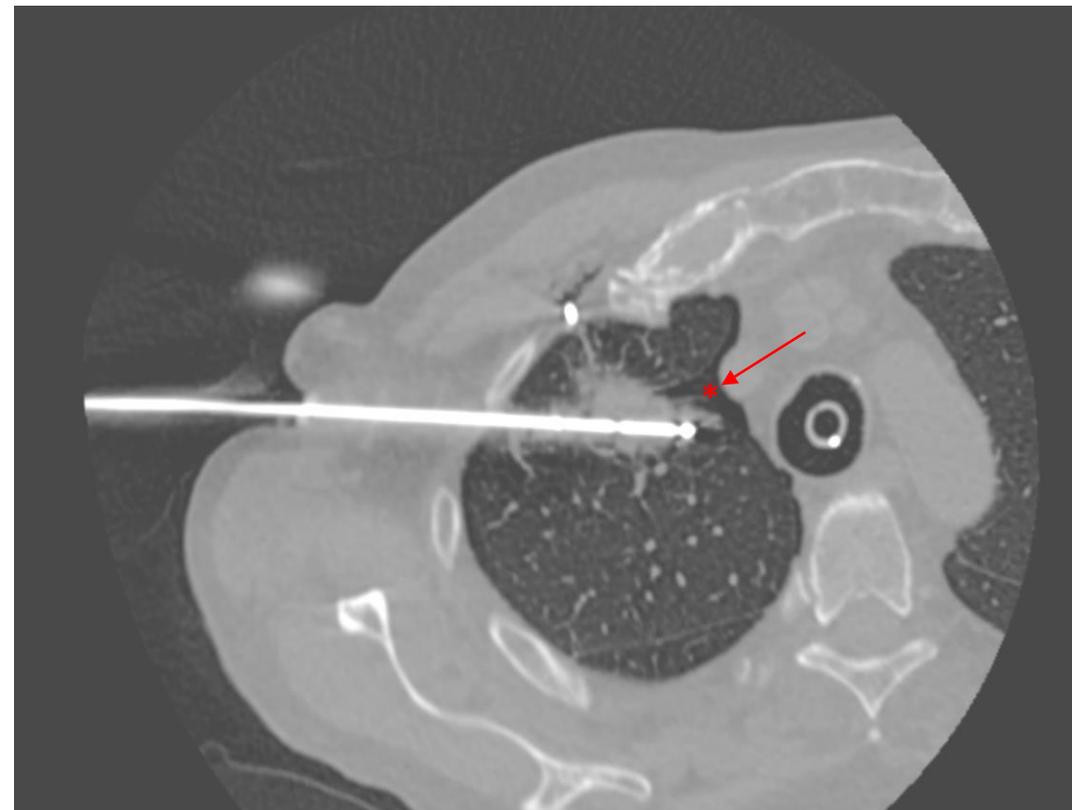


CO2 injection (asterisks) through the Gangi-HydroGuard<sup>®</sup> needle helps to separate and insulate the mediastinum from the tumor.

## Lung cryoablation close to the mediastinum



Axial CT showing the phrenic nerve (arrow) separated from the lung thanks to CO2 injection (asterisk).



Axial CT showing the phrenic nerve (arrow) at a lower level separated from the lung thanks to CO2 injection (asterisk).

Case and image courtesy of Julien Garnon, MD, University Hospital of Strasbourg, Strasbourg, France