Modified coaxial technique as an option in core biopsies of challenging small mediastinal lesions located near the large vessels: the "Marshmallow" technique.

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BACKGROUND: Percutaneous CT-guided biopsy has well-established role in the diagnosis, staging and monitoring of cancer. In a small part of mediastinal lesions, however, percutaneous procedures become quite challenging. Aiming to overcome these difficulties, new and bold techniques are developed for services around the world.

HYPOTHESIS: The use of a modified coaxial technique for biopsy of small mediastinal lesions, making possible to obtain fragments of lesions that are located near or have contact with vital structures.

METHODS: The "Marshmallow" technique has as its foundation the hydrodissection with gel. Using a co-axial needle, the interventional radiologist may pass through the lesion and make a hydrodissection with Lydocain gel and contrast, which is much more efficient than saline solution.

RESULTS: In mediastinal lesions, due to limited space and the large number of vital structures, this technique may have its role in increasing the applicability of percutaneous biopsies. It can be used in selected cases, transforming complex procedures in possible and safe biopsies.