Right ventricular metastatic tumor diagnosed by transvenous forceps biopsy

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Case history
1) A female patient in her 70’s.
2) Operation for SCC of buccal mucosa eight years ago, and chemo therapy for local and lymph node metastasis.
3) One month ago, right ventricular mass was indicated on follow-up CT scan.

IR procedure
1) 7 Fr guiding-sheath was inserted to right internal jugular vein.
2) Catheter tip was directed toward the tumor with transthoracic echocardiogram and X-ray fluoroscopy guidance.
3) Through the sheath, we inserted biopsy forceps (Radial Jaw 4P, Boston Scientific) and collected specimens.

Result
1) Pathological diagnosis of the specimen was metastatic squamous cell carcinoma
2) Palliative radiotherapy was planned based on the patient’s request.

Conclusion
1) Cardiac tumor biopsy is technically possible with transvenous approach.
2) Biopsy forceps or core biopsy needle can be used via guiding sheath.