A 3 month old infant was referred to our center, despite her cyanosis; echocardiography revealed no cardiac anomaly and the diagnosis was only possible after the inability to scan the lungs with isotopes injected in the upper limb and confirmed by catheterization (Fig. 1). The right SVC was draining to the LA with a fibrous band connected to the RA (Fig. 2). Surgical reimplantation of the SVC was performed and a small patch of pericardium was used to widen the anastomosis with a very successful outcome.