

放射性 同位元素 肺走查 및 力動學的 肺動脈撮影術을 施行한 先天性肺動靜脈瘻 一例

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= Abstract =

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Scintigraphic Findings of a Congenital Pulmonary Arteriovenous Fistula

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The scintigraphic findings of a congenital pulmonary arteriovenous fistula associated with Osler-Weber-Rendu disease are described.

환자는 10歳 女兒로서 2歳부터 發現된 青色症과 勞作性 呼吸困難을 主訴로 1982년 3월 서울대학교 병원 小兒科에 입원하여 肺動脈造影術 및 大動脈造影術上肺 (Fig. 2), 肝, 脾臟 및 空腸에 多發性 動靜脈瘻가 증명되었고, 顏面 및 口腔粘膜에 多發性 毛細血管擴張症의 소견으로 肺動靜脈瘻가 合併된 Osler-Weber-Rendu 痘으로 진단되었다.

上計 환자에서, 99m Tc-MAA (Macroaggreggregated albumin)를 이용한 肺스캔上 肺 右上葉에 灌流缺損 (perfusion defect)所見을 보였으며 99m Tc-MAA 粒子의 塞栓性 全身沈着으로 腎臟 및 甲状腺에의 摄取를 보였고 (Fig. 3), 99m Tc-HSA (human serum albumin)

를 이용한 방사성 동위원소 心臟血管造影術上 肺 右上葉의 肺動靜脈瘻 營養血管 (feeding vessel)의 早期攝取 및 肺의 灌流缺損, 그리고 다른 心臟外 左右短絡의 所見들이 觀察되었다 (Fig. 4).

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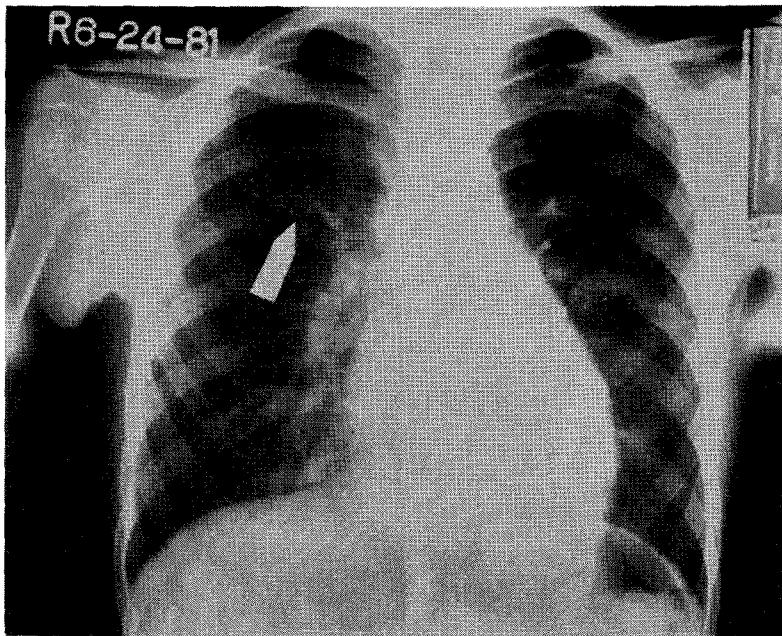


Fig. 1. Simple chest PA, arrow indicates slightly increased pulmonary vascular marking on right upper lobe

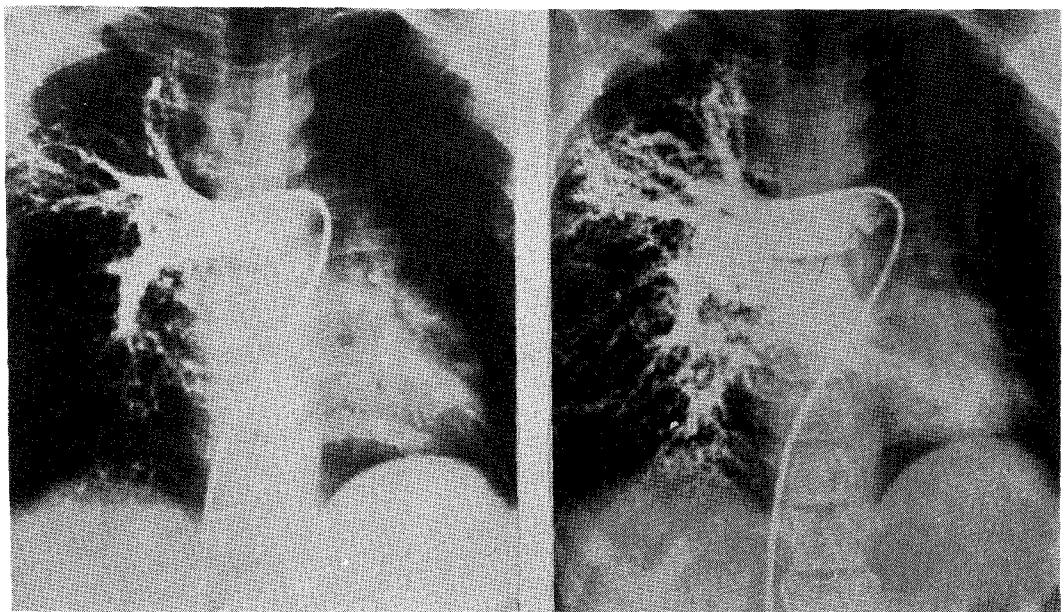


Fig. 2. Right pulmonary angiographic finding: left (1sec.), arrow indicates pulmonary vein visualized through pulmonary arteriovenous fistula at early arterial phase, right (2sec), note contrast media in left atrium and ventricle indicating rapid pulmonary circulation.

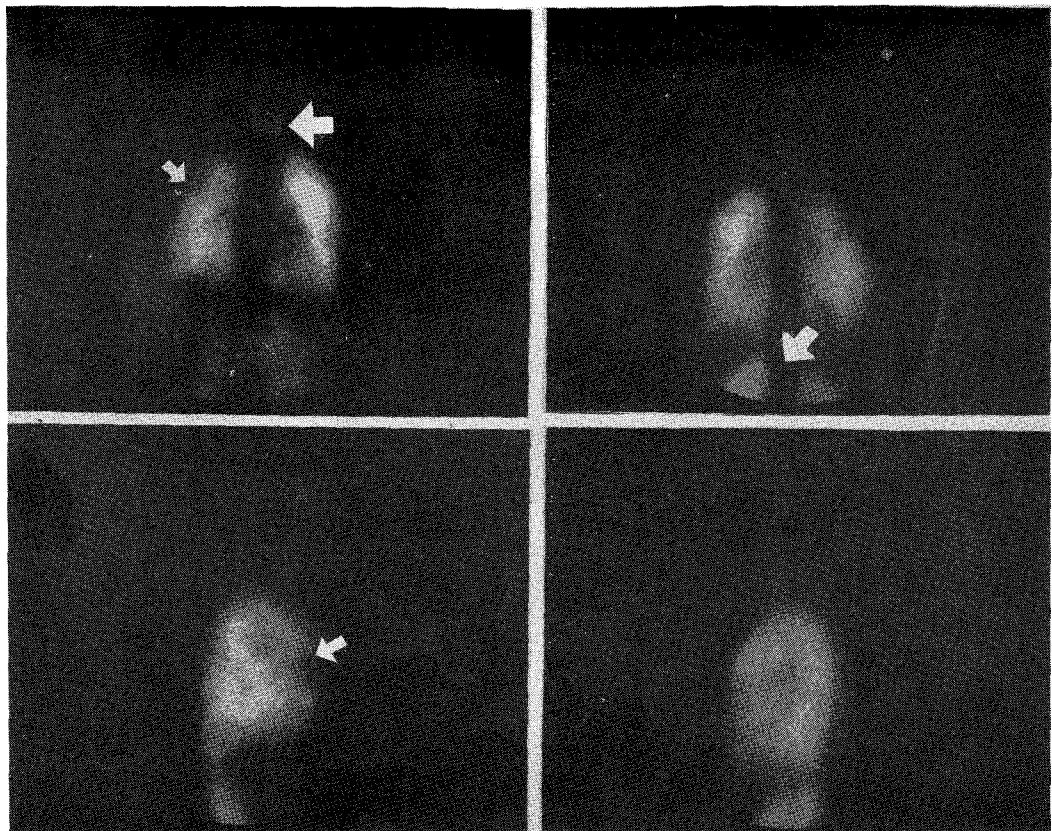


Fig. 3. Tc ^{99m} MAA lung scan: Big arrows mark thyroid and kidney uptake through systemic deposition with the particles that bypass the lung. Also note faintly visualized brain uptake. Small arrows indicate perfusion defect of lung

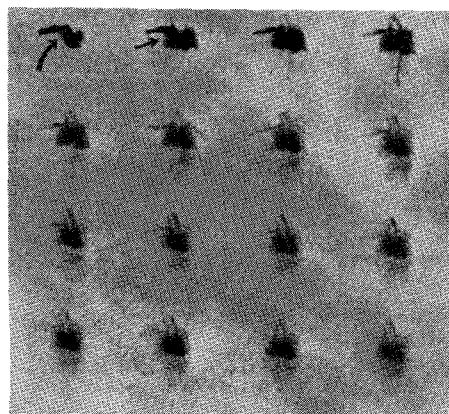


Fig. 4. Rodionuclide angiogram. Curved arrow indicates early uptake of feeding vessel to the arteriovenous fistula and straight arrow indicating perfusion defect. Also note the early visualization of left atrium, ventricle and aorta.

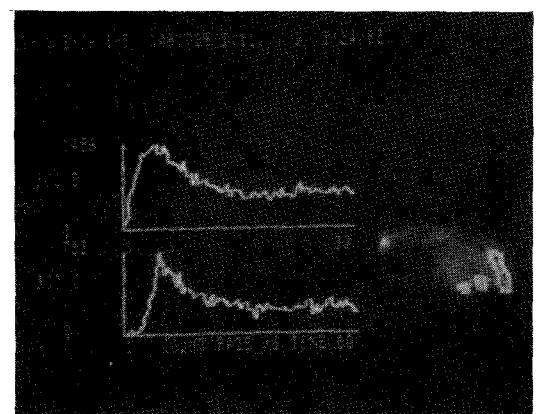


Fig. 5. Computer-generated time activity curve of lung (top) and left ventricle (bottom) showing almost simultaneous peaks of the two curves