Imaging Diagnosis of Conarium Cysts*

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ABSTRACT: Objective: To evaluate the value of CT and MRI in the diagnosis of conarium cysts.Materials and Methods: Five patients with conarium cysts were studied by CT,3 of them were studied by MRI and CT,2 of them were taken by enhanced MRI and CT examnations.And reviewed some about literatures.Results:All the patients showed rounded cystic changes within the conarium which were well delineated. CT scans of five cases revealed rounded liquid-density lesions in the conarium regions respectively.The lesions were well defined and the CT values were 12-16Hu;The lesions were hypointensity on T1-Weighted spin-echo pulse sequences and hyperintensity on T2-Weighted images of MRI.Conclusions:Conarium cysts and their characteristic manifestations could be well demonstrated on CT and MRI.

Keywords: Conarium ,Cyst , Imaging Diagnosis

松果体囊肿的影像学诊断

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摘要:目的:探讨 CT 与 MRI 在松果体囊肿诊断中的价值.材料与方法:5 例病例均做 CT 检查,3 例同时做 CT 与 MRI 检查,其中 2 例行 CT 与 MRI 增强检查.结合文献资料加以分析和总结.结果:CT 扫描 5 例囊肿均位于松果体区,呈类圆形低密度区,边界光滑锐利,CT 值为 12-16Hu.MRI 在 T1 加权像上呈低信号,T2 加权像表现为高信号,与脑脊液信号相仿.结论:CT 和 MRI 对松果体囊肿的诊断有重要作用,为其临床诊断与治疗提供有力的证据.

关键词:松果体 囊肿 影像诊断

Conarium cysts were unusual in some bypast internal articles [1,2].We found five cases of conarium cysts,reviewed some about literatures and analysed them,should improve clinical diagnosis of conarium cysts.

Methods

Toshiba TCT-300/EZ whole body CT,which belong to our hospital,and Simens Open type 0.5T MR,which belong to other hospital were applied.CT enhancement scan used 60% Angiografin 100ml or Omnapaque(300mgI/ml)100ml and injected Bolus way.Conarium MRI was performed in standard head coil,matrix256 X256,slice thickness 5mm,interval 2.5mm.Sagittal,coronal and axial images were obtained with T1-Weighted (TR580ms,TR11ms) by Spin-echo (SE) sequence.Axial images were obtained with T2-Weighted(TR3200ms,TE17,85,120ms).T1-Weighted images of two enhancement cases were obtained by Gd-DTPA 0.1mmol/kg intravenous injection.

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Clinic information:Two male cases,Three female cases,ranging from 17 to 61 in age with an average of 37.6 years,were headache and dizziness,one case of epilepsy,two cases of cerebral infarction,two cases were accidentally found in medical checkup.

Results

Cornarium cysts of five cases lied in quadrigeminal cistern of conarium region ,single and non-mass effect.

Imaging manifestations :CT plain scan showed that the diametres of lesions were from 0.6cm to 2.2cm in similar rounded low-density within conarium region,equated with density of water.The lession were well defined and CT values were 12-16Hu.Two of them were not enhanced.All the patients showed rounded cystic changes within the conarium which were well delineated by MRI.The lesions were hypointensity on T1-Weighted spin-echo pulse sequences and hyperintensity on T2-Weighted images of MRI and signals were even .The lessions weren't enhanced,however,their capsules were enhanced

Discussions

Conarium cysts are actually a kind of normal aberrance,it's specific origin.Someone considered superior part of third ventricle closed obstructing,left over cyst.Or,original cell,which should develop to glia,become a biggish cyst inserted ependyma.Or,conarium change putrescence and form cyst.[3] Someone guessed nerve - epitheliums,within original ventricle systems folded and involute or ectropion,form a bursa cavity,which protruded into or out to ventricle,and neck of bursa may disconnext and cyst isolate with ventricle in fetation.[4]Conarium cysts are classified with gelatinoid and nongelatinoid.Gelatinoid cysts lied in anterior part third ventricle ,however,nongelatinoid cysts lied inside or outside ventricle .Axial and coronal and sagittal images help definite tumor and posterior part third ventricle by MRI,so orient diagnosis is well accurate.MRI are multi parameter imaging,T_1 and T_2-weighted images of all kinds of tissue exist obviously difference,especially show obvious signal intensity for cyst.All the patients apply spin-echo pulse sequences,in hypointense on T_1-Weighted and hyperintense on T_2-Weighted images and equal signal intensity.Spin-density sequences displayed as hypointense areas with relaxation times similar to those of CSF.The edges of lesions were smooth ,regulation and trenchancy.CT was not as good in position diagnosis of conarium cyst,especialy small lesion as MRI,but in character diagnosis CT was as good as MRI,because of the exact CT value.The lesions of conarium cysts and their characteristic manifestations could be well demonstrated on CT and MRI allowing the differentiation between pineal cyctic and neoplastic condition.

References

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