909

- [9] Tsui EY, Chan JH, Leung TW, et al. Radionecrosis of the temporal lobe: dynamic susceptibility contrast MRI[]]. Neuroradiology,2000,42(2):149-152.
- [10] Tung GA, Evangelista P, Rogg JM, et al. Diffusion-weighted mr imaging of rim-enhancing brain masses: is markedly decreased water diffusion specific for brain abscess[J]. AJR,2001,177(3),709-712.
- [11] Youshino E, Ohmori Y, Imahori Y, et al. Irradiation efforts on the metabolism of matastatic brain tumors; analysis by positron emission tomography and ¹H-magnetic resonace spectroscopy[J]. Sterotact Funct Neurosurg, 1996, 66(Suppl): 240-259.
- 「12】 董海波,戴嘉中,蔡佩武,等.¹H 磁共振波 谱在胶质瘤放疗后复发和放射性脑坏死鉴 别中的初步应用[J].中华放射学杂志, 2001,35(6):439-441.
- [13] Chong VF, Rumpel H, Fan YF, et al. Temporal lobe changes following radiation therapy: imaging and proton MR spectroscopic

findings[J]. Eur Radiol, 2001, 11(2): 317-324

- $\lceil 14 \rceil$ Chan YL, Yeung DK, Leung SF, et al. Proton magnetic resonance spectroscopy of late delayed radiation-induced injury of the brain J]. J Magn Reson Imaging, 1999, 10 (2):130-137.
- Beauchesne P, Soler C, Maatougui K, et al. [15] Is cerebral tomoscintigraphy with 99m Tc-MI-BI useful in the diagnosis of local recurrence in patients with malignant gliomas [J]? Cancer Radiother, 1998, 2(1): 42-48.
- [16] Bader JB, Samnick S, Schaefer A, et al. Contribution of nuclear medicine to the diagnosis of recurrent brain tumors and cerebral radionecrosis[J]. Radiology, 1998, 38(11): 924-929.
- Stokkel M, Stevens H, Taphoorn M, et al. [17] Differentiation between recurrent brain tumor and post-radiation necrosis: the value of ²⁰¹T1 SPECT versus ¹⁸F-FDG PET using a dual-headed coincidence camera-a polit

study[J]. Nuclear Medicine Communications 1999,20(5):411-417.

- [18] Thiel Apietrzyk V, Sturn V, et al. Enhanced accuracy in differential diagnosis of radiation necrosis by positron emission tomographymagnetic resonance imaging coregistration: technical case report [J]. Neurosurgery, 2000,46(1):232-234.
- [19] Sonoda Y, Kumabe T, Takahashi T, et al. Clinical usefulness of ¹¹ C-MET PET and 201 T1 SPECT for differentiation of recurrent glioma from radiation necrosis [J]. Neurol Mel Chir Tokyo, 1998, 38(6): 342-347.
- [20] Schwartz RB, Carvalho PA, Alexander E 3rd, et al. Radiation-necrosis vs high-grade recurrent glioma: differentiation by using dual-isotope SPECT with 201 T1 and 99m Tc-HMPAO[J]. AJNR, 1991, 12(6): 1187-1192
- $\lceil 21 \rceil$ Moody EB, Hodes JE, Walsh JW, et al. Thallium-avid cerebral radiation necrosis[1]. Clin Nucl Med, 1994, 19(7): 611-613.

外伤性下颌关节窝后壁骨折 1 例

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患者 男,21岁。因夜间长期坐位工 作,突然起立时,头晕,眼前发黑,倒地, 头面部下颌骨着地。CT 检查:头颅 CT 未见颅内出血和颅骨骨折。做颞骨螺旋 扫描,然后行 MPR 技术,在水平位上,左 下颌关节窝后壁骨折断端向左外耳道倾 斜,致外耳道骨部狭窄,有积液(图1)。 冠状位上左下颌关节头后,外耳道前壁 有明显骨折线(图 2)。矢状位上左下颌 关节窝后壁,在鼓部"U"形骨板的"U"字 形成角处有明显的骨折线,并向左外耳 道倾斜(图 3)。

讨论 头面部外伤损伤引起骨折, 在临床上并不罕见,CT 能够准确诊断骨 折程度及范围,但外伤引起下颌关节窝



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后壁骨折甚少。下颌关节窝后壁骨折形 成与下颌关节窝后壁的解剖结构、厚薄 密切相关。下颌关节窝的后壁位于颞骨 的鼓部,鼓部位于鳞部之下,岩部之外, 乳突部之前,为扁曲的"U"形骨板,构成 骨性外耳道的前壁、下壁和部分后壁。 其前上方以鳞鼓裂和鳞部相接,后方以 鼓乳裂和乳突部毗邻,内侧以岩鼓裂和 岩部接连。鼓部的前下方形成下颌窝的 后壁,鼓部缺口居上,名"鼓切迹"。在临 床上发现扁曲的"U"形骨板,因人而异, 厚度约为1.5~9mm。此例病人"U"形 骨板较薄,再加上外力作用下颌关节头 向下颌窝后壁作用,使较薄的下颌关节 窝后壁骨折,致使骨折断端向外耳道倾 斜,骨性外耳道狭窄。外耳道皮下组织 其少,皮肤与软骨膜和骨膜相贴,故骨折 后,断端致皮肤破裂,使外耳道出血经外 耳孔流出。

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