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## · 临床医学图像 ·

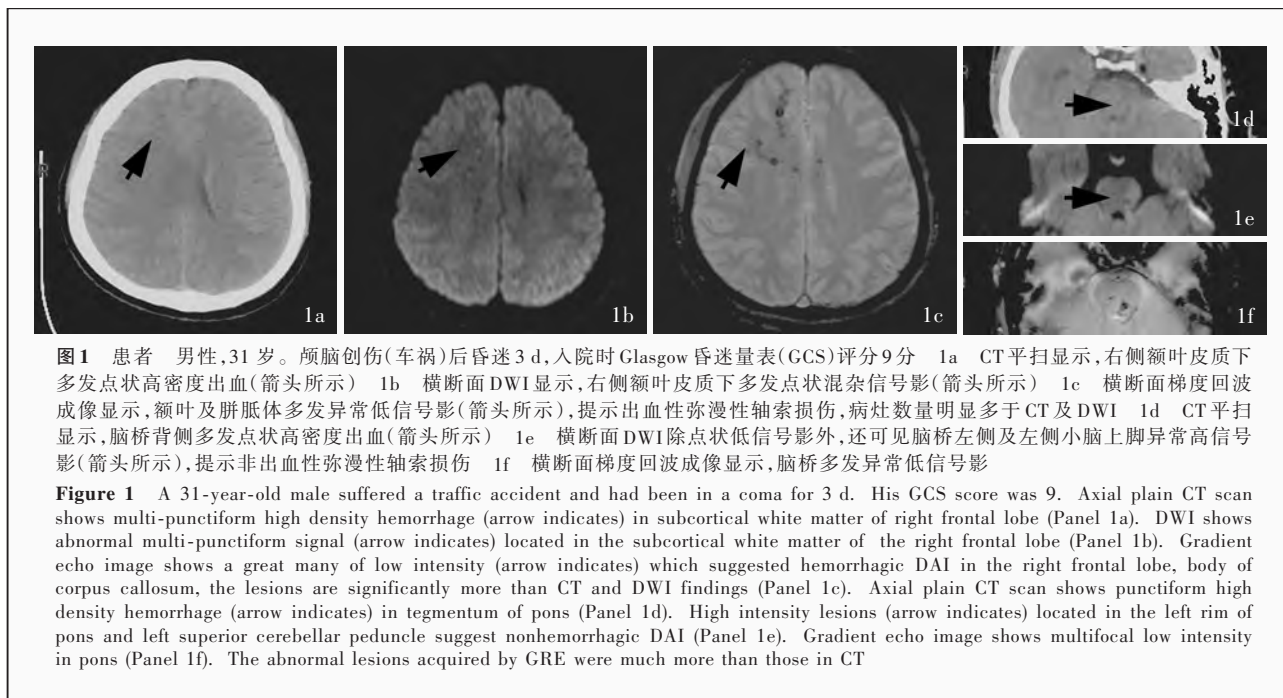
### 弥漫性轴索损伤

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#### Diffuse axonal injury

HAN Tong

Department of Neuroradiology, Tianjin Huanhu Hospital, Tianjin 300060, China (Email: mrbold@163.com)



弥漫性轴索损伤(DAI)属于闭合性原发性弥漫性脑损伤。是由于头部成角、加(减)速运动或旋转性暴力出现弥漫性轴索扭曲、肿胀、断裂及皮髓质交界区穿行血管中断所致。好发于皮髓质交界区、胼胝体、尾状核、丘脑、内囊及中脑被盖的背外侧。其病理变化包括:(1)广泛性轴索损害,累及大脑、脑干和小脑的白质和大脑深部核质,包括中线旁皮质下白质、胼胝体、穹窿柱、内囊、基底节及丘脑、齿状核背侧小脑叶、皮质脊髓束、内侧丘脑系、内侧纵束等。(2)胼胝体局限性出血灶。(3)上脑干背外侧局限性出血灶,病变位于中脑和脑桥上部,单侧或双侧,常累及小脑上脚。CT可正常或显示部分出血性DAI的特征,包括胼胝体及周围、第三脑室周围和脑干小点片状高密度影。MRI对出血性和非出血性DAI的诊断敏感性均优于CT,典型征象包括:(1)对非出血性DAI以扩散加权成像(DWI)最为敏感,表现为圆形、椭圆形或线条状高信号影。(2)对出血性损伤灶以梯度回波序列(GRE)或磁敏感加权成像(SWI)等T<sub>2</sub>序列最为敏感,呈明显低信号。急性期为点状长T<sub>1</sub>、长T<sub>2</sub>信号;亚急性期T<sub>1</sub>WI和T<sub>2</sub>WI均呈高信号。(3)随访显示弥漫性脑萎缩、脑室代偿性扩大。陈旧性出血性DAI可见含铁血黄素沉积。诊断须结合外伤病史。非出血性DAI要与脱髓鞘病变、小转移瘤、小血管病变导致的腔隙性梗死灶相鉴别;出血性DAI要与高血压、血管壁淀粉样变性或隐匿性血管畸形所致微出血鉴别。

(天津市环湖医院神经放射科韩彤供稿)