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个案与短篇

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C型臂X线机辅助定位下喉深部组织金属异物取出1例

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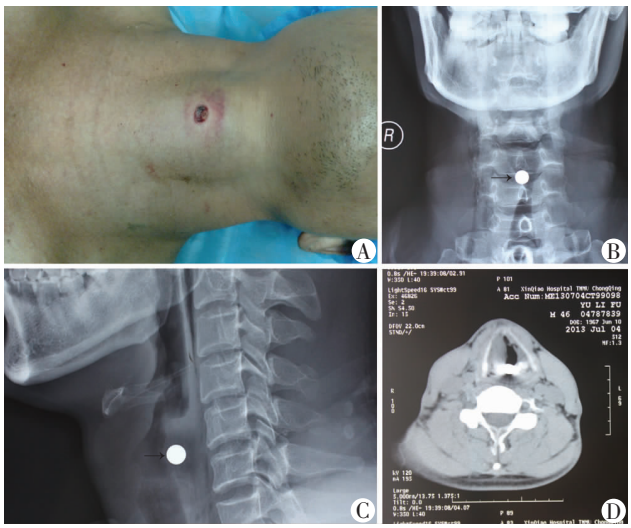
[**关键词**] 金属异物;喉深部组织;C型臂X线机
[**中图法分类号**] R767.8 [**文献标志码**] B

1 临床资料

患者,男性,46岁,因颈部外伤后疼痛不适6 h以颈部外伤就诊。患者6 h前和家人玩耍气弹枪时不慎被铅弹击中颈部正中,顿感疼痛不适,说话费力,吞咽稍有困难,但无明显咳嗽、咯血、气喘,伤后即被送往当地医院就诊。颈椎正侧位片检查提示:颈椎骨质增生,颈5/6椎间隙平面前方可见类圆形高密度影,考虑喉部异物。初步诊断为"颈部外伤、喉部异物",为行手术治疗遂转来我院。入院时查体:生命体征平稳,颈前正中可见一直径约0.5 cm类圆形弹孔(图1A),少量渗血,局部未见血肿,触痛明显,未触及明显异物。颈部正侧位X线片可见颈椎前方金属异物(图1B、C);颈部CT提示颈部椎体平面前方可见类圆形高密度影,考虑(喉部)异物(图1D)。三维成像提示异物存留位置在右侧劈裂或杓间区。电子喉镜检查提示右侧劈裂明显肿胀,未见血迹及黏膜破口。

患者逐渐出现声嘶、呼吸费力,于是急诊行气管切开,同时在全麻下行支撑喉镜下喉部异物探查术,术中仔细检查,见喉腔结构清晰,黏膜完整无破损,左侧声带稍有充血,右侧声带充血明显,中前份可见息肉样新生物,黏膜轻微糜烂,右侧劈裂肿胀明显,金属钳多次探查劈裂及杓间区,未探及异物。术后给予肌注破伤风抗毒素及抗感染、消炎治疗。

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A:患者颈前正中,可见弹孔;B、C:X线正、侧位片;D:CT表现;↑:示金属异物

图1 喉深部金属异物损伤患者X线片与CT表现

1周后全麻下行喉裂开术。沿颈前甲状软骨中段作横切口,见右侧甲状软骨板中部有一直径约1 cm类圆形弹孔,沿中线垂直破开甲状软骨板,仔细检查喉腔,未见弹道、弹孔,右侧劈裂仍肿胀。在杓间区、右侧劈裂肿胀处用探针通过C形臂X线机反复定位,明确异物的准确位置及深度(图2)后,在定位的右侧劈裂处切开黏膜、黏膜下组织,切口长约1 cm,用直止血钳稍行钝性分离(深度约0.5 cm)即可触及并看到球形金属异

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物,顺利取出异物,切口用可吸收线予以连续缝合,关闭喉腔,全身给予抗感染、止血等治疗。术后 1 周拔管,复查电子喉镜示双侧声带动度好,声门闭合好,无声嘶,无呼吸困难。



图 2　C 形臂 X 线机术中准确定位异物的位置

2　讨论

喉腔异物、颈部异物相对常见且有较为规范的手术取出方法,而喉深部组织(黏膜下甚至是肌肉内)的异物在和平时期相对少见,如何做到成功取出异物又尽可能少地损伤正常组织值得探索,并可以此为战时积累经验。颈部结构复杂、血运丰富、功能重要,对于颈部外伤患者,要求医务人员严格遵守"救命第一,救治结合"的颈部外伤治疗原则及治疗流程。枪弹伤、爆炸伤后导致的异物残留如果时间过久,可直接损伤重要血管神经或者致局部炎症扩散引起严重并发症,原则上均应该取出[1]。

颈部解剖复杂且腔隙较多,对于较小的异物成功取出的风险较大,术前准确的定位、合理的手术方案,以及对相关部位解剖的熟悉是成功的关键。术中大多使用探针、电磁铁、B 超、X 线片、CT、C 形臂 X 线机等进行实时定位。喉腔异物大多可以通过喉镜、电子喉镜予以取出,即使是较为复杂的喉部异物也可以通过直达喉镜予以取出[2-3]。在该病例中,异物从颈部进入,在组织内穿行,到达喉腔但又没有进入喉腔,非常特殊。如果沿弹道探取异物,路径太长,既盲目又损伤周围组织太多,不可取。在喉腔见不到弹孔和弹道,无法在喉镜下取出,但我们进行了尝试。通过术前检查所得到的资料,分析异物存留的部位应该在杓状软骨前方,没有穿透环状软骨板后方,存留在几乎是中线的位置,在杓状软骨靠喉腔一侧,究竟使用颈侧切开还是喉裂开,我们进行了讨论,各有利弊,最后我们选择喉裂开是基于手术路径的熟练程度和方便异物取出而决定的,我们认为咽侧切开不如行喉裂开暴露好。术后恢复效果非常好,声音几乎没有受到影响。

喉腔结构精细,涉及发声、呼吸等重要生理功能,要求术中准确操作,尽可能减轻副损伤,因此我们选择探针结合 C 形臂 X 线机的方法来定位。C 型臂 X 线机适时定位在手术中的应用能节约手术时间,减少痛苦,避免因盲目操作导致术后并发症,在颈部金属异物的取出中是十分有意义的,但定位中检查者及患者均受辐射。该病例中的异物较大,距离黏膜表面较浅,因此采用多根探针配合 C 形臂 X 线机照片的方法来减少暴露,取得了非常好的效果。对于此类异物,提倡使用这种异物取出的方法。

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