

闭合性胸锁关节脱位合并金黄色葡萄球菌感染 1 例

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患者,男,60岁,重物压砸致上胸部疼痛2周,呼吸困难3d入院。患者2周前搬抬重物时不慎被砸中上胸部,当即出现上胸部疼痛,右肩活动时疼痛加重。在当地医院就诊予以对症治疗(具体过程不详),患者症状无明显缓解。3d前出现呼吸困难,于我院急诊科行CT检查示右侧包裹性胸腔积液,右胸锁关节脱位。以右胸锁关节脱位,右侧包裹性胸腔积液收入院。

入院查体:右胸锁关节隆起,较健侧突出,明显红肿,皮温稍高,无明显包块,未扪及波动感。右胸锁关节周围压痛,右肩关节活动时疼痛加重(图1a,1b)。血常规示WBC $10.02 \times 10^9/L$,血沉150 mm/h。入院后予以吸氧、止痛、预防感染等对症治疗。病情稳定后完善CT三维重建提示右胸锁关节脱位(图1c,1d)。术前检查血常规示:WBC $6.07 \times 10^9/L$,血沉120 mm/h。在全麻下行清创+胸锁关节脱位复位克氏针固定+韧带修复术。患者取沙滩椅位,术前见右胸锁关节处约2 cm×3 cm的隆起,皮温稍高,以隆起处为中心,沿锁骨走行取长约5 cm的切口,切开皮肤,分离皮下组织,探查见右胸锁关节周围较多脓性分泌物,右胸锁关节中心型脱位,胸锁前韧带断裂。彻底清创后,复位胸锁关节,克氏针固定,2-0肌腱线修复胸锁前韧带(图1e,1f)。术中取分泌物进行病

理检查及细菌培养,病理检查结果示炎性组织增生,细菌培养为金黄色葡萄球菌,结核芯片检查未提示异常(图1g)。

术后体温正常,伤口未见明显红肿、无渗血渗液,患者一般情况良好,未见明显感染迹象,继续予以抗感染等对症治疗,悬吊患肢。术后1个月复查血常规、CRP、血沉未见异常,伤口乙级愈合。

讨论

(1)闭合性脱位伴感染原因。本例患者为闭合性脱位,胸前区皮肤无擦伤、裂伤等情况。患者因包裹性胸腔积液伴呼吸困难入院。胸腔积液后,肺部排痰能力下降,容易并发肺部感染;同时由于创伤可能导致短暂的免疫抑制。因此,肺部等邻近部位感染可能导致闭合性胸锁关节脱位并发感染。胸锁关节属于上肢微动关节,发生胸锁关节感染非常罕见^[1]。一般发生在具有感染高危风险的患者身上,通常是单侧的。本例患者因外伤致创伤性湿肺,具有感染高危风险。McAninch等^[2]报道了1例没有明显危险因素的患者,最初表现为左胸、左颈肩疼痛,抗生素治疗可能的肺炎,症状复发,随着初始症状发作后反复发烧,最后放射学诊断左侧胸锁关节感染。目前闭合性骨折合并感染的报道较多^[3-4],但闭合性脱位并发感染的情况相对较少。

(2)闭合性脱位伴感染治疗方式。本例患者术前血常规提示白细胞总数和中性粒细胞比例均未明显升高,但血沉升高。术前未引起重视,术中探查发现感染,决定行清创、克氏针固定、韧带修复。在无明显危险因素的情况下,闭合性骨折脱位合并感染的诊断相对困难^[5]。血沉在闭合性骨折脱位合并感染的

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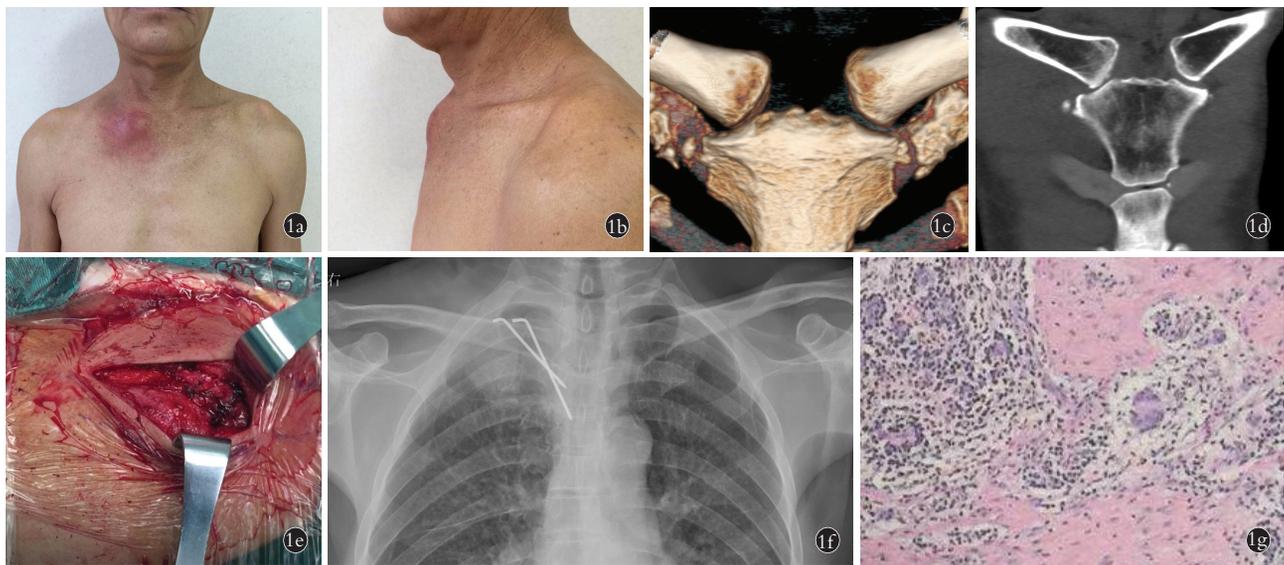


图 1 男,60岁,右胸锁关节脱位伴感染 **1a.** 术前正面外观照示右侧胸锁关节处明显红肿,较健侧稍隆起 **1b.** 术前侧面外观照示患侧较健侧稍隆起 **1c.** 术前三维 CT 示右侧胸锁关节中心型脱位 **1d.** 术前 CT 冠状位平扫示右侧锁骨胸骨端向健侧移位 **1e.** 术中用肌腱线行胸锁前韧带修复 **1f.** 术后胸部正位 X 线片示右胸锁关节在位,克氏针长短合适 **1g.** 术后病理学检查见大量炎性细胞增生(HE×200)

Fig.1 Patient,male,60 years old,right sternoclavicular dislocation with infection **1a.** Preoperative external photo showed obvious redness and swelling on the right sternoclavicular joint,slightly elevated on the right side **1b.** Preoperative lateral appearance showed slight uplift of the healthy side **1c.** Preoperative 3D CT imaging showed the central dislocation of the right sternoclavicular joint **1d.** Preoperative CT on coronal plane showed the right side of clavicular sternum was displaced to the healthy side **1e.** The anterior sternoclavicular ligament was repaired with the tendon line **1f.** Post-operative AP X-ray showed the right sternoclavicular joint dislocation was corrected and the length of kirschner wire was appropriate **1g.** Postoperative pathological examination showed a large number of inflammatory cell hyperplasia (HE×200)

诊断中有一定的帮助。这也提示临床医师在以后的诊疗工作中需要更加重视血沉、CRP、PCT 等感染指标的作用。本例患者术中探查发现胸锁关节中心型脱位,胸锁前韧带断裂,由于存在感染,本例患者采取了清创+复位克氏针固定+韧带修复术,有效地控制了感染,同时行复位脱位的胸锁关节。胸锁关节脱位分型可分为前脱位、后脱位和中心脱位,其中以前脱位较为常见。本例为中心脱位,其发生机制主要为直接暴力所致。胸锁关节脱位的固定方式较多^[6],刘攀等^[7]采用锁骨钩钢板固定胸锁关节脱位,锁骨钩钢板能在复位固定胸锁关节的同时保留胸锁关节微动功能,且不损伤胸锁关节软骨面,手术安全性高,固定效果好,患者术后可进行早期康复锻炼。钢板内固定的稳定性应该比克氏针高,但由于感染的原因,放置钢板内固定风险太高,因此,本例患者优先控制感染,在控制感染的同时行克氏针固定,取得了较为理想的效果。

通过对本例患者的诊治,提示在临床诊疗过程中无论开放还是闭合骨折脱位,都需要警惕感染的可能,密切关注 CRP 等感染指标,有助于感染的预防和治疗。

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