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· 病例报道 ·

Contrast-enhanced ultrasonic diagnosis of segmental testicular infarction: a case report

超声造影诊断节段性睾丸梗死 1 例

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[中图分类号] R445.1; R588.1

[文献标识码] B

患者男, 50 岁, 因右侧阴囊疼痛 1 d 就诊。专科体格检查: 右侧阴囊较左侧稍肿大, 皮温略高, 右侧睾丸稍饱满, 压痛及抬举痛明显, 右侧精索有触痛感。血常规示: 白细胞计数 $12.0 \times 10^9/L$, 中性粒细胞百分比 82.5%; 人绒毛膜促性腺激素 0.32 U/L; 甲胎蛋白 $3.5 \mu g/L$ 。二维超声检查: 右侧睾丸上半部分回声不均匀, CDFI 仅探及其内少许血流信号(图 1)。右侧精索走行稍迂曲, 左侧睾丸及双侧附睾超声未见明显异常。二维超声提示: 右侧睾丸扭转? 为进一步明确诊断行睾丸超声造影检查: 右侧睾丸 44 s 到达峰值, 睾丸下半部分呈均匀增强, 上半部分仅见少许线条样增强, 且见大小约 $2.0 \text{ cm} \times 1.8 \text{ cm}$ 不规则无增强区(图 2)。超声造影提示: 右侧睾丸上半部分造影剂充盈缺损区, 符合缺血性改变, 考虑节段性睾丸梗死可能。临床给予抗感染治疗 3 d 后, 患者睾丸疼痛感消失, 专科体格检查: 右侧睾丸稍饱满, 无压痛及抬举痛。复查血常规示: 白细胞计数 $6.9 \times 10^9/L$, 中性

粒细胞百分比 63.0%。复查超声造影提示: 右侧睾丸 40 s 到达峰值, 睾丸上半部分可见大小约 $1.0 \text{ cm} \times 0.7 \text{ cm}$ 不规则无增强区, 较前次明显缩小(图 3)。治疗后好转, 出院诊断: 右侧节段性睾丸梗死。

讨论: 节段性睾丸梗死主要发生于 20~40 岁男性^[1], 本例患者为中年男性, 临床较罕见。本病因炎症、外伤、手术、动脉硬化等导致睾丸动脉分支受阻所致。睾丸动脉进入睾丸后依次为包膜下动脉、向心动脉和回旋支, 以上分支在睾丸内呈条带样层状排列, 当单支血管阻塞时, 梗死区呈条带样分布; 若受累血管较多, 集中分布在睾丸一极时, 梗死区则呈片状分布, 超声造影可表现为不同形态的造影剂充盈缺损区, 对诊断节段性睾丸梗死具有高度特异性^[2]。本例患者给予抗感染治疗后疼痛消失, 复查超声造影提示梗死区明显缩小, 血常规检查各指标恢复正常, 临床考虑为炎症所致的睾丸梗死。睾丸炎症可产生

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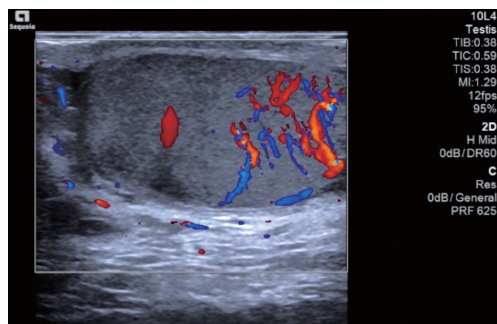


图1 二维超声示右侧睾丸上半部分回声不均匀, CDFI仅探及其内少许血流信号

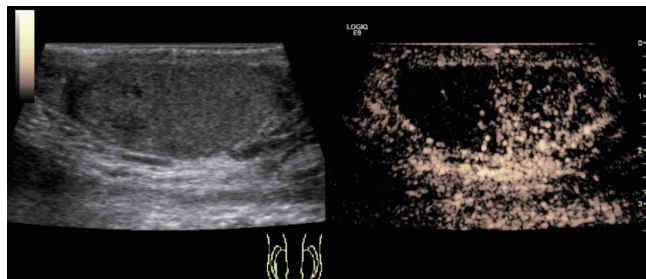


图2 首次超声造影示右侧睾丸上半部分见造影剂充盈缺损区(大小约2.0 cm×1.8 cm)

类似筋膜室综合征效应, 睾丸微动脉受压和微小静脉压力增高均可导致睾丸局部梗死^[3]。本病需与睾丸扭转鉴别, 二者均为睾丸缺血性病变, 临床症状和专科体格检查表现高度相似, 常规超声均表现为血流信号消失或减少, 但二者的处理和预后

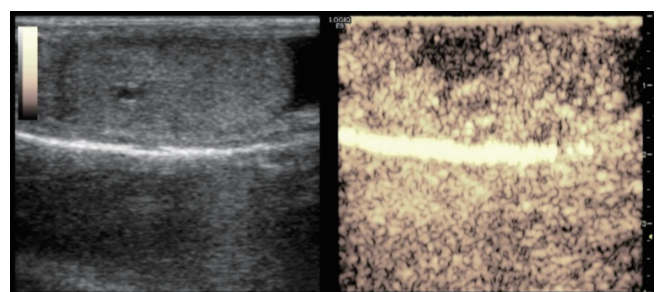


图3 治疗后复查超声造影示右侧睾丸造影剂充盈缺损区明显缩小(大小约1.0 cm×0.7 cm)

不同。超声造影能准确诊断节段性睾丸梗死, 使大多患者通过保守治疗即可改善症状, 避免了不必要的手术切除和术中探查, 具有重要的临床意义。

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