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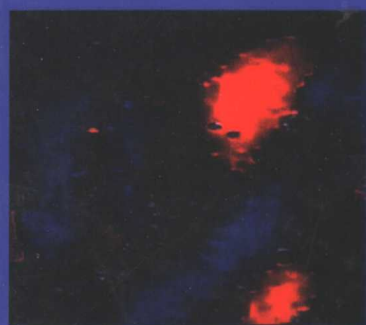
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Fetal & Pediatric Ultrasound

实用胎儿与小儿超声影像

 人民卫生出版社



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Harris L. Cohen, Carlos J. Sivit, et al

Fetal and Pediatric Ultrasound: A Casebook Approach

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实用胎儿与小儿超声影像

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译者序

与超声诊断技术的应用范围及其发展速度相比，国内外有关小儿超声诊断的参考书可谓寥寥可数，早期国外出版的专著也多为图谱之类。由夏焙、吴瑛主编的我国首部《小儿超声诊断学》出版后，几乎同时，我们得到了国外最新出版的这本胎儿及小儿超声影像专著。

《Fetal and Pediatric Ultrasound: A Casebook Approach》由 Harris L. Cohen 和 Carlos J. Sivit 主编，美国东部地区 33 位医生参加撰写，其内容为胎儿与小儿疾病的超声诊断，写作构思别具一格，以案例分析的方式引导读者的思维，针对临床经常遇到的问题，注重实际操作的方法与技巧，读下去如同是在听一堂生动的讲座，受益匪浅。

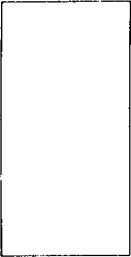
我们才识浅薄，经验不足，理解和表达能力有限，但还是希望尽早将该书翻译出来，介绍给广大超声医学工作者。我们要感谢两位国内知名专家李成荣、吴瑛教授为本书审校把关，使译文基本上保持了原著的风格特点。翻译的错误在所难免，敬请广大读者批评指正。

感谢美国 Thomas Jefferson 大学医学院的刘吉斌教授、虞姬文女士的帮助。

夏 焙

2002 年 6 月

于深圳市儿童医院



阅读方法

本书是以自我测试的方式，使读者详细理解每一章节中所显示的胎儿与小儿超声影像。为达到这一目的，全书分为 120 节，并在每节的首页提出问题及相关图像，没有注解；在正文中注明章节号、标题、作者姓名、图解及其详细诊断内容。每节的内容包括疾病的病理概要、声像图表现以及诊断思维方法。例如，从输卵管卵巢脓肿声像图的诊断分析入手，引伸至盆腔感染性疾病的讨论、与相关图像的鉴别诊断，以及如何检查的操作技巧等。

为避免读者以先入为主的思维方式阅读图像，给读者一定的思考空间，本书在正文前仅列出简单的目录，包括各章及页码；含各章节标题的完整目录列于正文之后，以便读者检索。彩色多普勒图和标本照片均汇集在正文后。

本书采用病案分析的方法，是一本具有实用性和可读性的参考书，希望能为读者接受。

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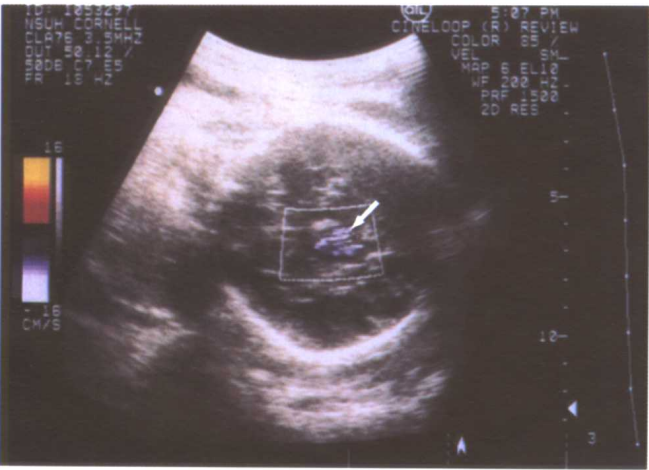
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彩图1（图1-11C） 脑积水与正常颞叶回声的鉴别。C. 与B图同一患者，在侧脑室外的实质性低回声内，彩色多普勒（箭头）和频谱多普勒均显示位于外侧裂内的大脑中动脉血流信号。



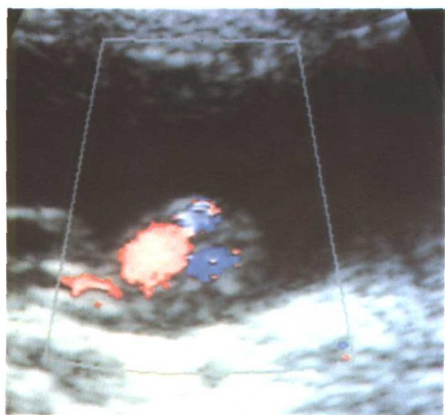
彩图2（图2-5） 病理标本,前脑无裂畸形的单一脑室。沿大脑背侧冠状面切开，单一脑室与周围脑组织分界明显，如同脑内的空腔，白色组织为小脑幕，后方为小脑。



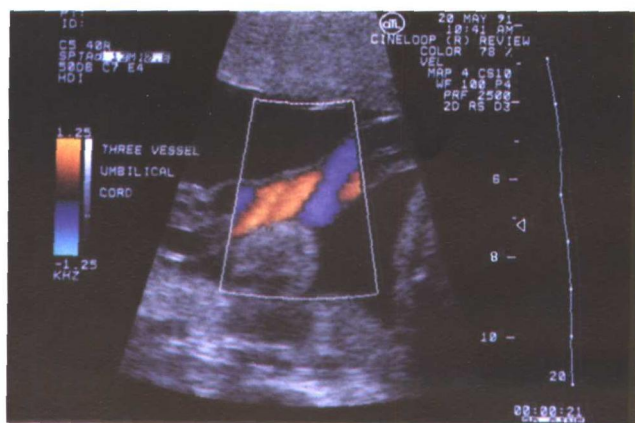
彩图3（图3-6） 胎儿脑彩色多普勒血流图，囊肿暗区内即刻被彩色填充（箭头），提示该结构为血管。脉冲多普勒显示囊肿内血流呈双向不规则频谱，提示典型的 Galen 静脉瘤或其他的动静脉畸形。



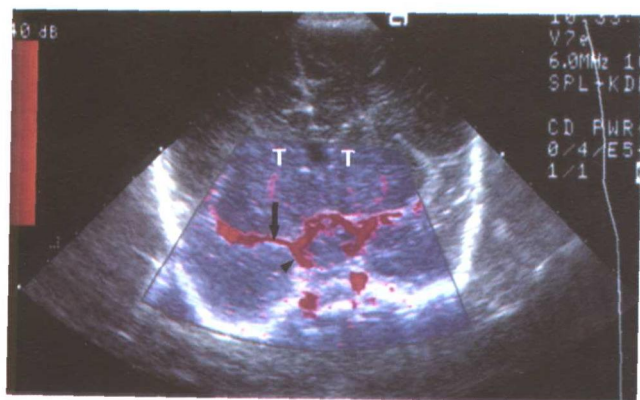
彩图4（图11-5A） 腹裂的病理标本。A. 腹裂胎儿的尸体标本，脐带（箭头）位于腹正中的正常位置，肿块自腹中线左侧的缺损处膨出，均为小肠。



彩图5 (图24-6) 正常脐带。脐带短轴图, 彩色多普勒血流显像, 脐静脉呈红色血流信号, 脐动脉则呈蓝色, 血流方向相反。



彩图6 (图24-8) 正常脐带。脐带长轴的斜切面图, 这是正常的三根血管脐带。彩色多普勒显示一根脐静脉为蓝色, 二根脐动脉为红色, 脐带血管象绳索样盘旋。单脐动脉时, 彩色多普勒无绳索样血管盘旋。

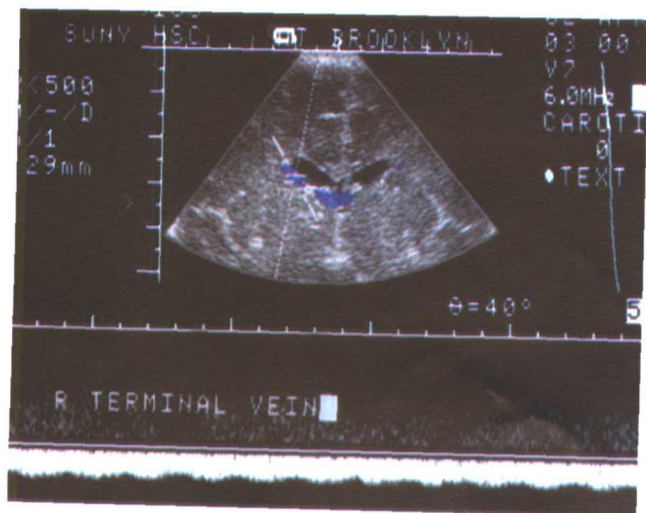


A

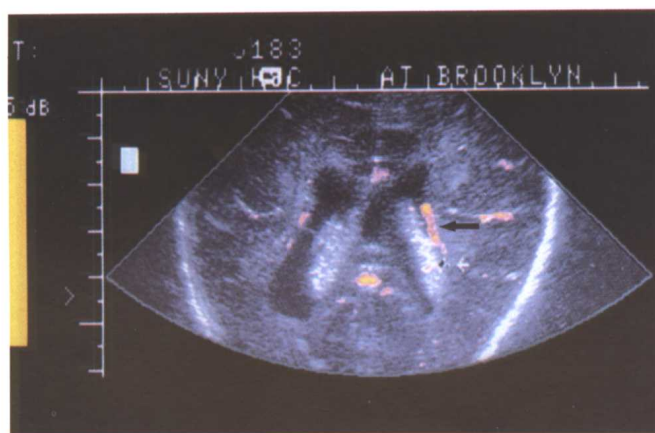


B

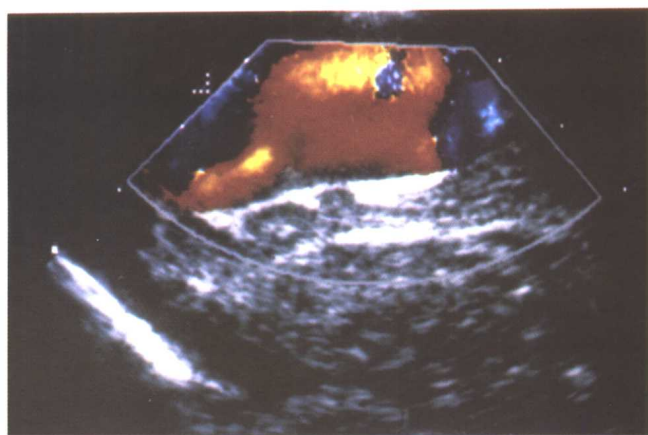
彩图7 (图27-16A、B) 新生儿颅脑能量多普勒图。**A.**新生儿脑冠状切面图显示 Willis 环, 箭头示右侧大脑中动脉, 短箭头示右侧后交通动脉, 丘脑 (T) 内纤细的血管是豆纹动脉。这些血管在常规彩色血流图常难以显示, 能量多普勒对低速血流有较高的敏感性, 可检出纤细的小血管; **B.**矢状切面图显示大脑前动脉的各细小分枝。



彩图8 (图27-20) 正常脑实质内末梢静脉。早产儿, I级室管膜下出血, 冠状切面图显示末梢静脉的多普勒频谱图。彩色多普勒血流图显示右侧末梢静脉呈蓝色、呈连续的静脉窦频谱, 随呼吸略有变化。左侧室管膜下的末梢静脉频谱未显示。多普勒血流检查有助于了解末梢静脉是否正常, 是否累及出血病变。



彩图9 (图28-4) 脉络丛彩色多普勒血流图。对部分可疑患者,应用彩色多普勒可鉴别正常脉络丛与早期血凝块,冠状切面图显示脉络膜内有血流信号,左侧脉络丛回声正常 (箭头)。



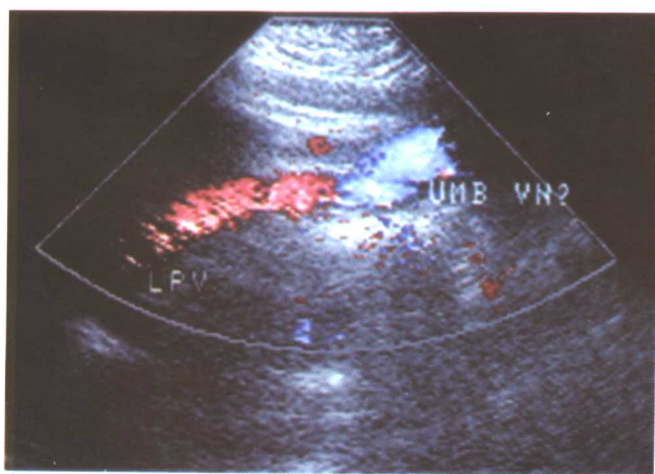
彩图10 (图31-5B) 矢状切面图显示新生儿胼胝体嘴部的无回声暗区,局部有彩色血流填充。管状回声和双向多普勒血流信号证实为动静脉畸形。



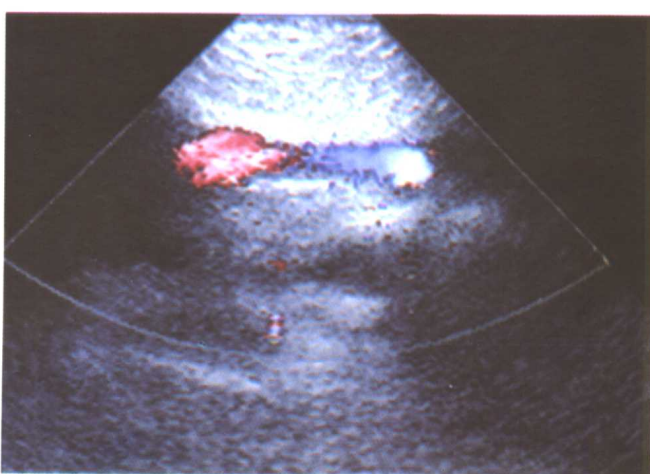
彩图11 (图31-7C) Galen 动静脉畸形,脑积水。胎儿出生后不久死亡,尸体标本的冠状切面,箭头示侧脑室前角轻度扩张。囊状结构位于大脑正中,囊肿的压迫导致脑积水。



彩图12 (图38-4) 血管内皮瘤彩色多普勒血流图。与图38-1为同一患儿,肝脏横切面显示血管内皮瘤内血流增多。



A



B

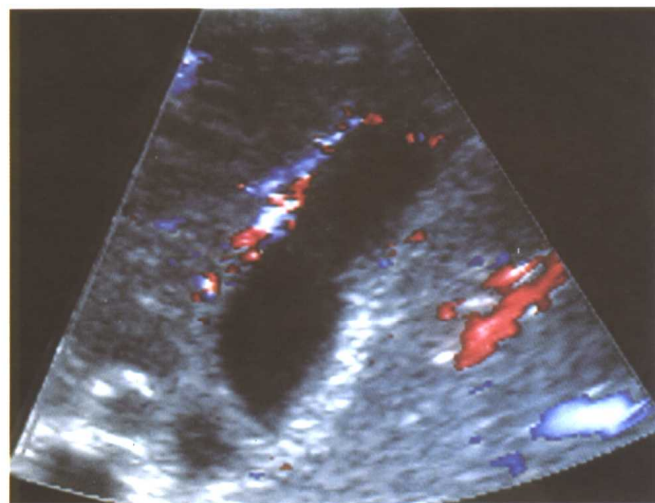
彩图13 (图40-5A、B) 门脉高压症,脐静脉开放。**A.** 门静脉高压的患儿,肝左叶纵切面图显示门静脉左支 (LPV) 的血流,与开放的脐静脉相通 (UMB VN2); **B.** 同一患者上腹正中纵切面显示脐静脉的血流。



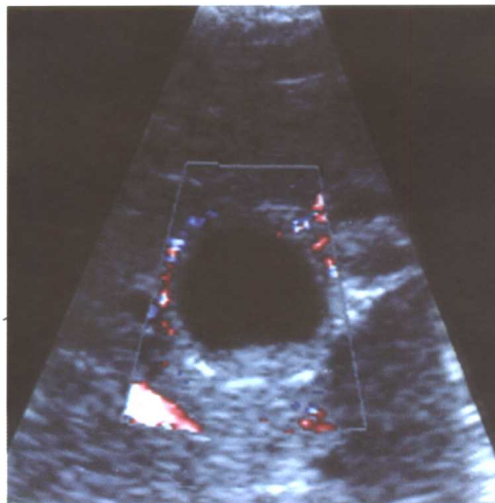
彩图14 (图43-1B) 肝右叶横切面 (A) 和纵切面 (B) 图。



彩图15 (图43-2B) 肝脏海绵状血管瘤。横切图 (A) 和纵切图 (B) 显示在局部肝脏强回声病变中的多血流状态。

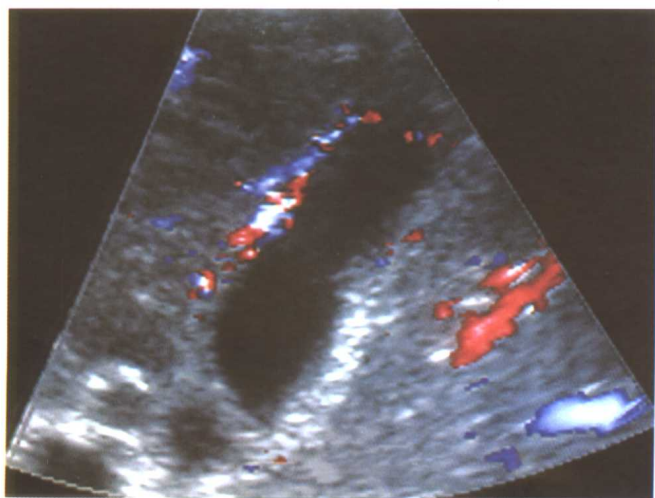


A

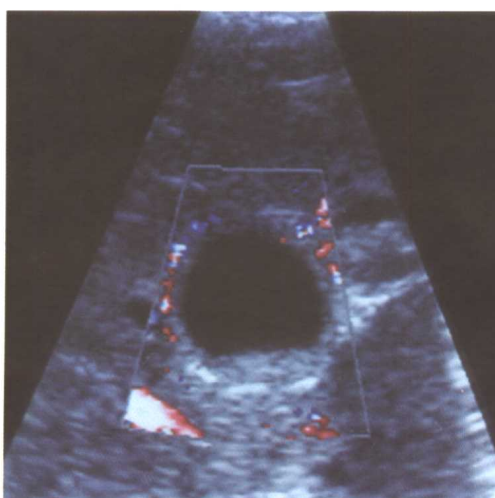


B

彩图16 (图44-1A、B) 彩色多普勒超声检查显示胆囊长轴(A)和短轴 (B) 图。



A



B

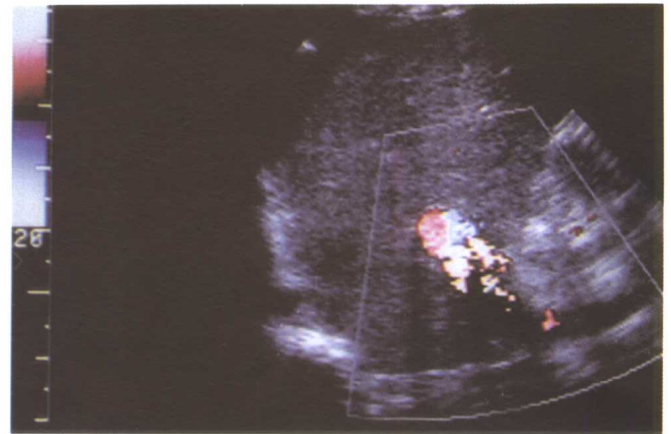
彩图17 (图44-2A、B) 急性胆囊炎，胆囊壁血流增多。经胆囊长轴 (A) 和短轴 (B) 图，显示胆囊壁增厚，彩色多普勒可显示明显的增多血流信号。



彩图18 (图47-4) 肝实质内血肿, 彩色多普勒超声血肿内无血流信号。经肝脏纵轴切图彩色多普勒超声显示肝实质血肿区血流信号缺失。

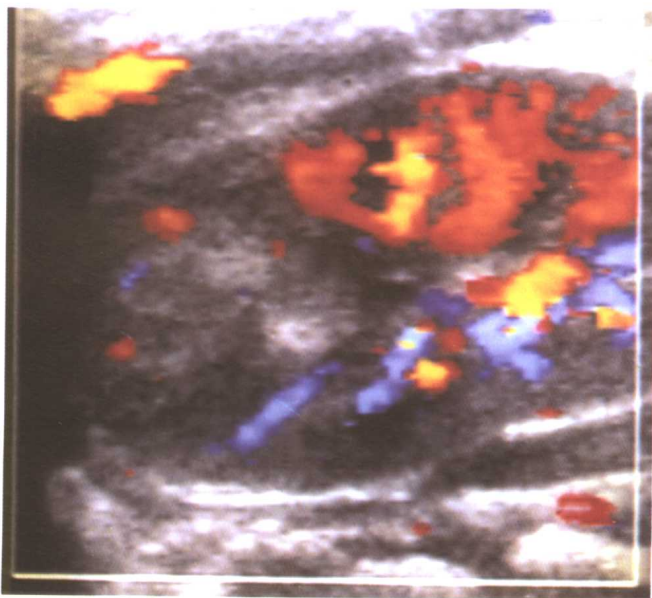


A



B

彩图19 (图53-3A、B) 静脉导管未闭。A. 与图53-1 同一患儿, 经肝脏纵切图彩色多普勒显示门静脉主干内血流正常, 指向肝脏; B. 与 A 图同一患儿, 经肝脏纵切图显示经静脉导管的血流方向由门静脉左干 (PV) 至下腔静脉 (IVC)。

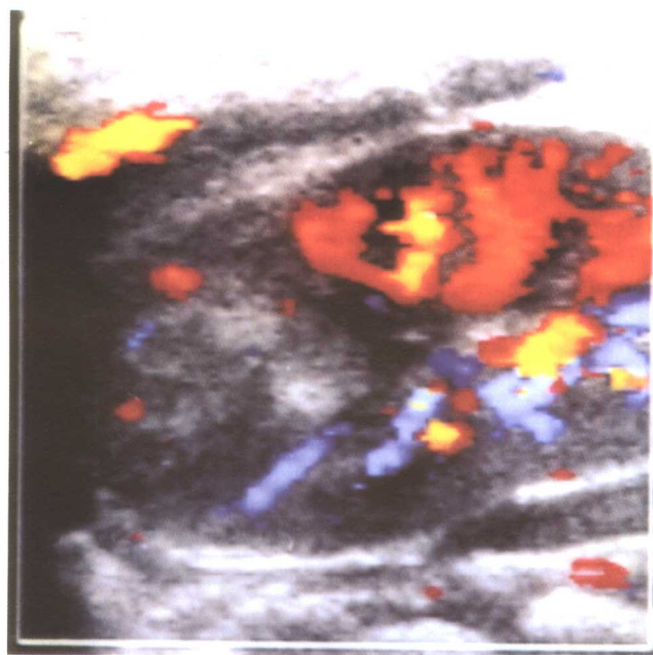


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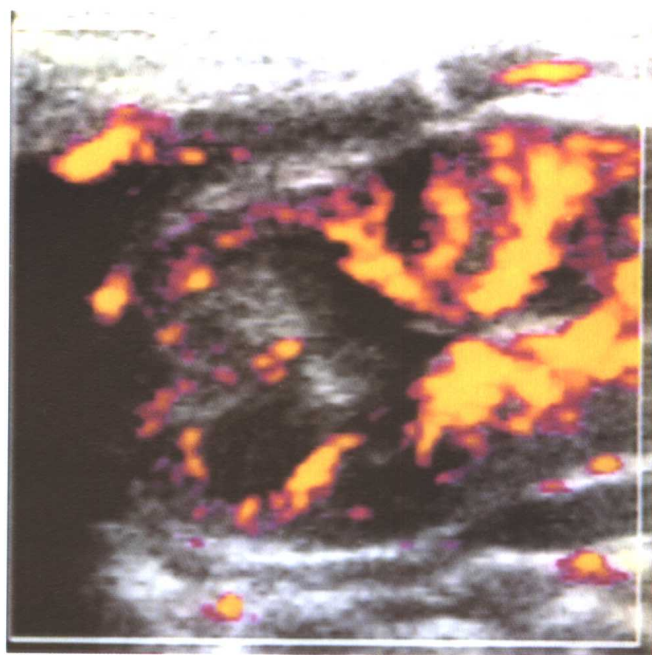


C

彩图20 (图73-1B、C) 彩色多普勒血流图 (B) 及多普勒能量图 (C)。

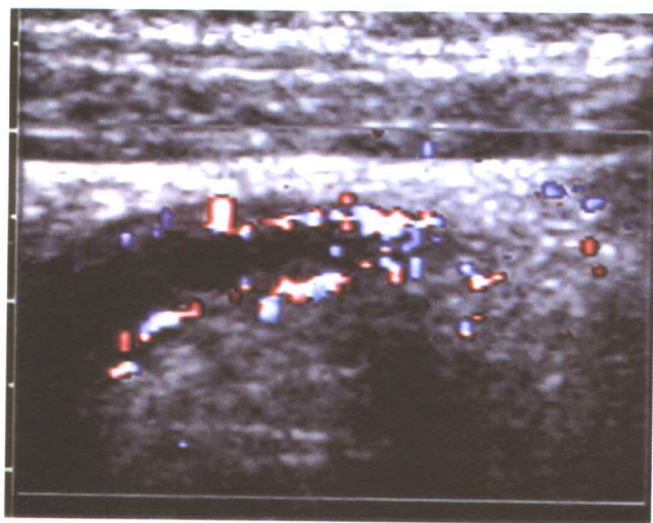


B



C

彩图21 (图73-2B、C) 急性肾盂肾炎。B. 左肾纵切图，彩色多普勒显示左肾上极血流灌注减少；C. 左肾纵切图，能量多普勒显示左肾上极血流灌注减少。

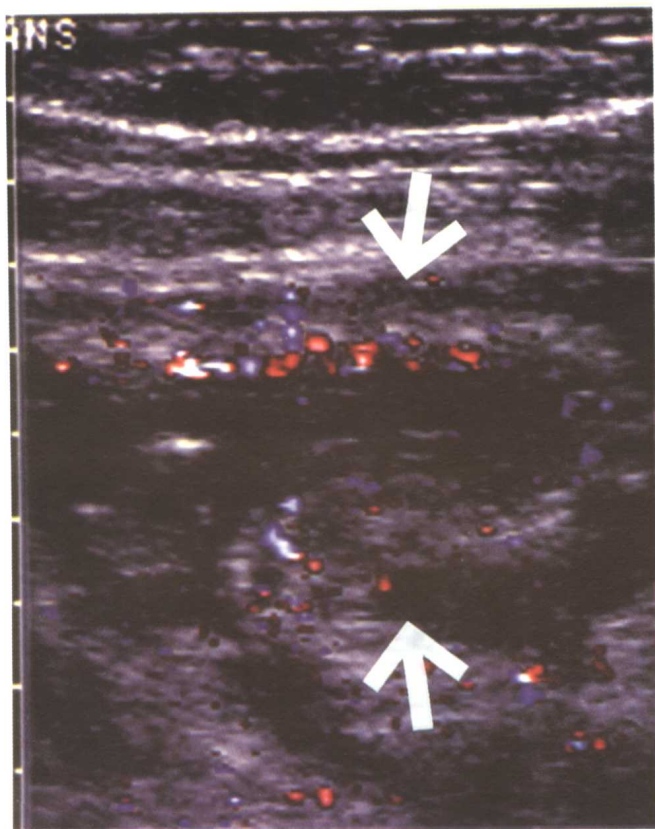


A

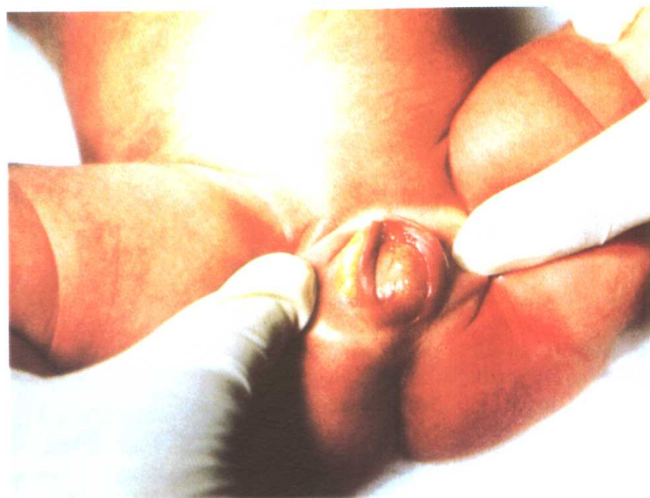


B

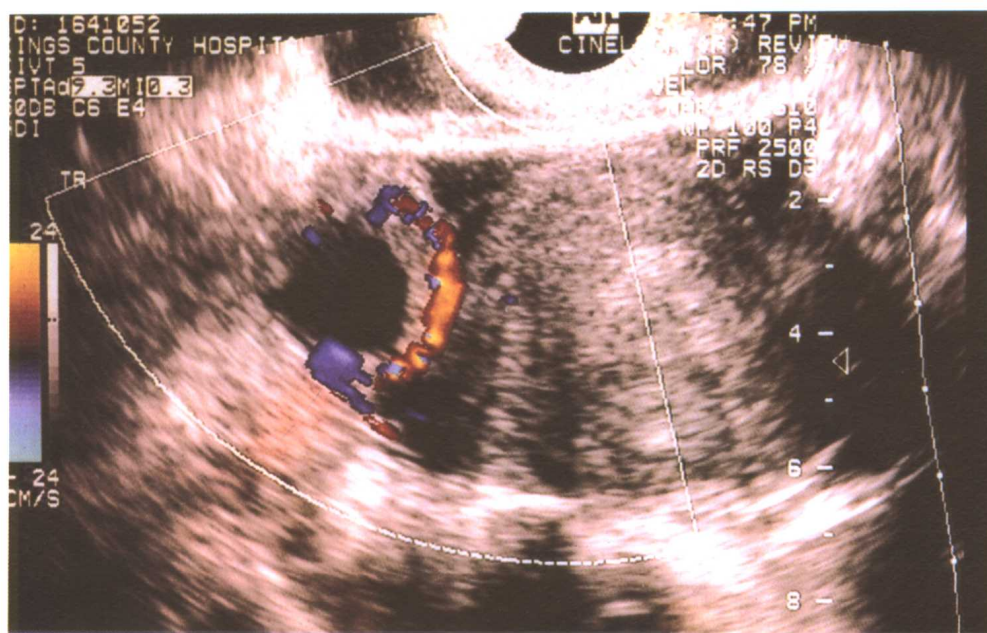
彩图22 (图87-7A、B) 急性阑尾炎，彩色多普勒血流图。A. 阑尾的长轴图显示阑尾壁明显充血；B. 同一患儿阑尾的短轴图显示阑尾壁血流信号丰富。



彩图23 (图91-5) 中性粒细胞缺乏性盲肠炎, 彩色多普勒显示肠壁充血。中性粒细胞缺乏性盲肠炎患儿, 骨髓移植术后, 盲肠壁增厚, 彩色多普勒显示局部血流信号丰富, 粘膜和粘膜下层回声增强, 肌层回声稍低。



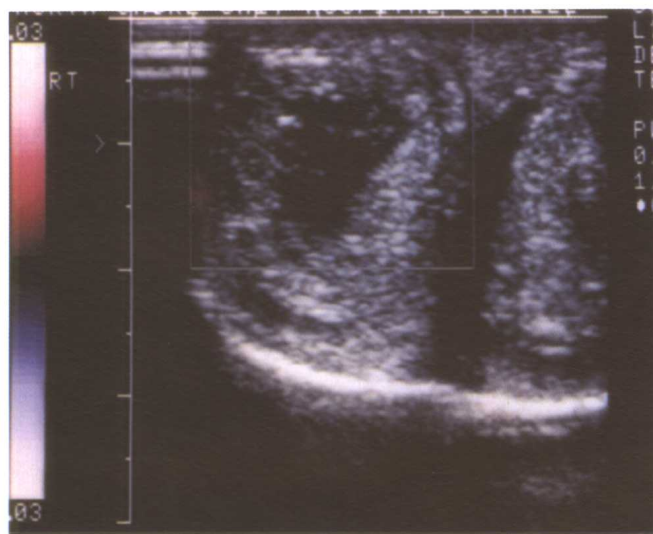
彩图24 (图94-3) 新生儿处女膜闭锁, 阴唇间肿块经证实为阴道积液导致的处女膜膨隆。



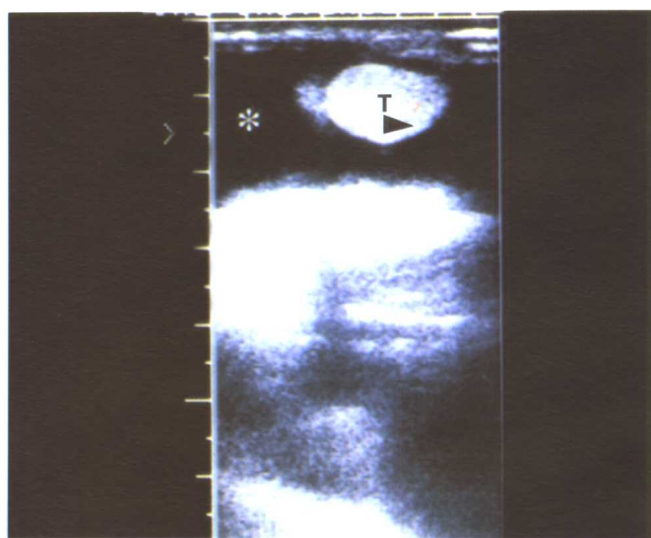
彩图25 (图96-4B) 异位妊娠。B. 青春女性, 经阴道超声检查, 横切图, 探头标志朝向右侧附件。彩色多普勒检查显示右侧附件囊状回声周围呈环状丰富血流信号, 宫腔内未显示妊娠囊回声。囊状暗区周围血流环见于妊娠囊和妊娠黄体, 另一切面显示此囊内有胚芽回声, 证实为异位妊娠。



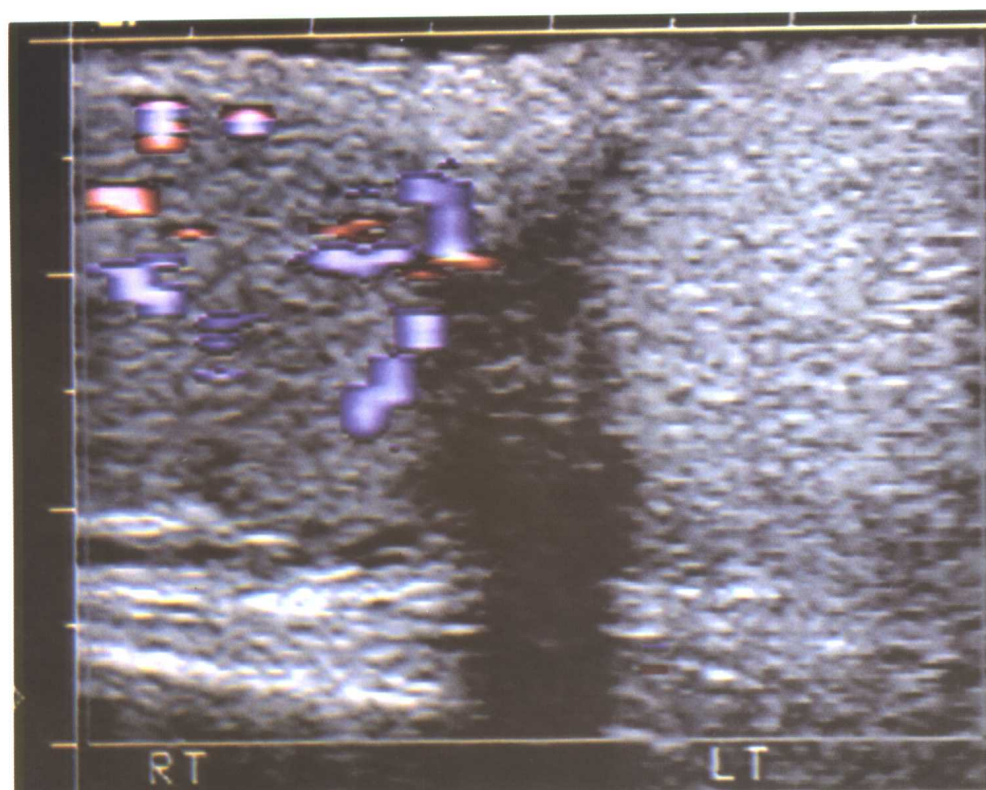
彩图26 (图99-7B) 卵巢畸胎瘤-含毛发。B. 病理标本, 此标本为青春期卵巢畸胎瘤, 内有毛发(箭头)、软组织(证实为小脑组织)和脂肪。此瘤内的毛发经超声显示出来, 并且囊腔内至少有一半为囊性成分。



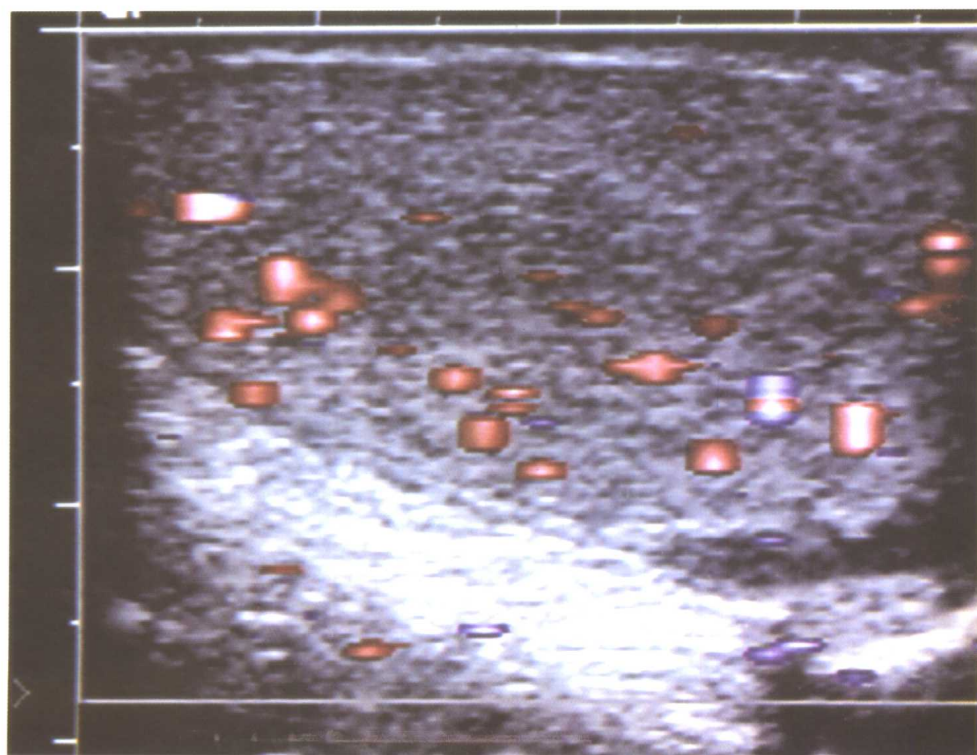
彩图27 (图103-3) 右侧睾丸扭转。横切图, 彩色多普勒血流图。右侧睾丸内未显示血流信号。



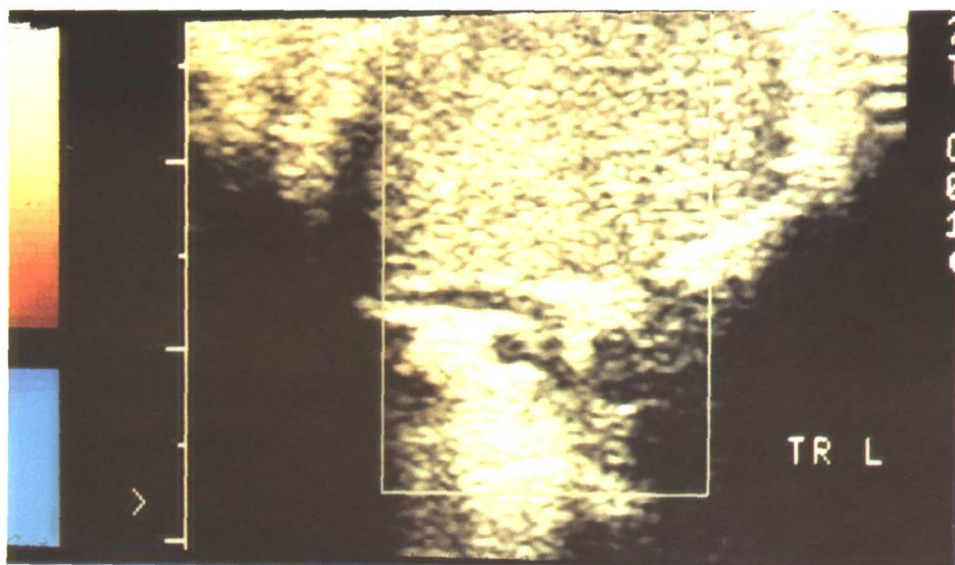
彩图28 (图103-5) 大量鞘膜积液, 睾丸回声正常。右侧睾丸纵切图, 彩色多普勒显示新生儿睾丸及大量鞘膜积液 (*), 睾丸回声正常、均匀。注意睾丸的回声比先前睾丸扭转的病例睾丸回声明显增强。睾丸内显示点状血流信号 (小箭头), 频谱显示为动脉血流。



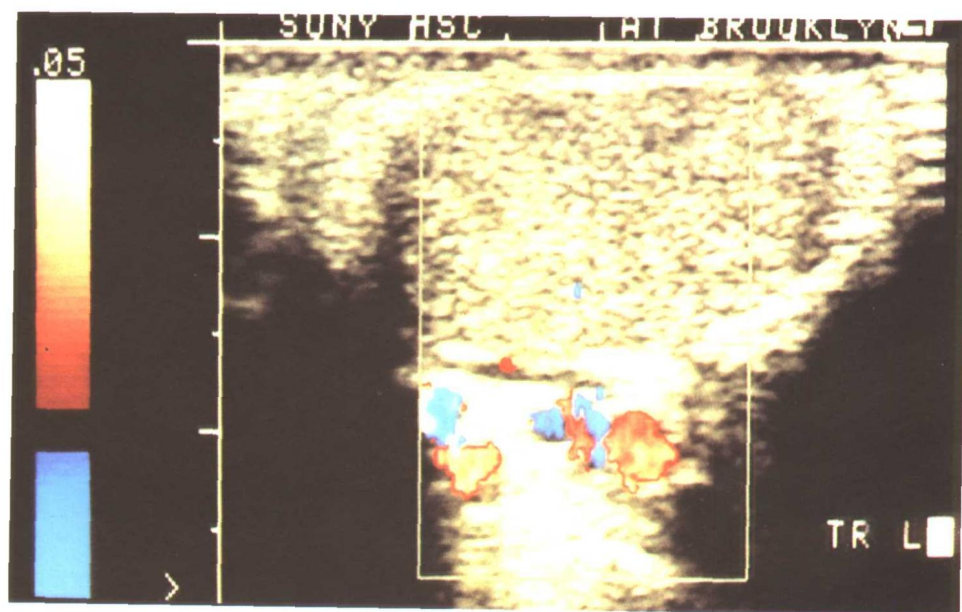
彩图29 (图104-2及104-4A) 图104-2为阴囊横切面,彩色多普勒血流图。图104-4A.(同图104-2) 双侧睾丸横切图,彩色多普勒血流图显示右侧睾丸血流灌注正常,而增大的左侧睾丸无血流灌注,诊断为左侧睾丸扭转。



彩图30 (图104-4B) 纵切图,右侧睾丸回声及血流信号正常,提示睾丸正常。



彩图31 (图106-1A及106-2A) 106-1A. 左侧阴囊横切图,彩色多普勒图像。106-2A.(同图106-1A) 精索静脉曲张。静息状态下,左侧阴囊横切图彩色多普勒显示左侧睾丸后方管状环形无回声结构。



彩图32 (图106-1B及106-2B) 106-1B. 左侧阴囊横切图,彩色多普勒图像。106-2B.(同图106-1B) 精索静脉曲张。用力屏气时,左侧阴囊横切图彩色多普勒显示睾丸外无回声结构内有彩色血流信号,为静脉频谱。