margins and little, if any, periosteal reaction. Destruction of overlying cortex with extension into the soft tissues is not uncommon. CT and MRI are useful to delineate the lesion and its relationship to adjacent structures. Tumours can range in diameter from 3 to 20 cm and have a greywhite, fibrous, solid appearance. Microscopically, desmoplastic fibroma is similar to soft-tissue fibromatosis, consisting of spindle-shaped fibroblasts, dense collagen matrix, rare mitotic figures and variable cellularity. The lesion exhibits an infiltrative, destructive pattern with permeation of bone marrow spaces and haversian canals, as well as surrounding soft tissues. Ultrastructural and immunohistochemical studies reveal prominent myofibroblastic differentiation.

The clinical behaviour of desmoplastic fibroma is similar to that of aggressive fibromatosis of soft tissues in that local infiltration and recurrences are common, but metastatic disease does not occur. Simple curettage and bone grafting can result in a 40% recurrence rate, so wide local excision is the recommended treatment.■

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Category 6, Items 36 and 37

Pelvic fractures are common after high-speed motor vehicle crashes. Successful treatment requires rapid resuscitation from hemorrhagic shock, identification of associated injuries, and bony stabilization to reduce long-term disability.

Based on the extent of injuries, celiotomy is necessary. In the case described, the laceration of the perineum is diagnostic of an open fracture and extends into the rectum. To prevent continued fecal contamination of the pelvic spaces and hematoma, a diverting colostomy with distal colon washout is indicated. Debridement, irrigation, and cleansing of the contaminated area are warranted, and packing of the area may be needed to control bleeding. External pelvic fixation closes the pelvic space and is effective in control of bleeding in most cases. Continued pelvic bleeding is a life-threatening problem, but operative ligation of the hypogastric vessels in an attempt to decrease pelvic bleeding is not useful because of extensive collateral flow, and because most bleeding originates from the



fracture sites. Operative ligation of these vessels would require opening the contained pelvic hematoma, leading to further hemorrhage.

After external pelvic fixation and in the absence of another obvious source for bleeding, continued hypotension and transfusions are indicative of pelvic vascular injury. Angiography is indicated to locate and embolize the source of the bleeding (see angiogram). This usually stabilizes the patient, assuming all other sources of bleeding have been addressed. A repeat CT scan will not localize the site of injury and celiotomy with pelvic packing is not effective in controlling arterial bleeding. Application of a pneumatic antishock garment (PASG) is not indicated because it severely limits patient access, at times results in extremity ischemia from compartment syndrome, and is not effective in controlling arterial bleeding. Diuretic therapy is not indicated for hemorrhagic shock.

36 C 37 A

References

- 1. Evers BM, Cryer HM, Miller FB: Pelvic fracture hemorrhage. Arch Surg 124:422-424, 1989
- 2. Flint L, Babikian G, Anders M, et al: Definitive control of mortality from severe pelvic fracture. Ann Surg 211:703-711, 1990
- 3. Richardson JD, Harty J, Amin M, Flint LM: Open pelvic fractures. J Trauma 22:533-538, 1982
- 4. Trafton PG: Pelvic ring injuries. Surg Clin North Am 70:655-669, 1990