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Perineal pruritus after iv dexamethasone administration

To the Editor:

Intravenous dexamethasone is useful in the prevention or treatment of postoperative nausea and vomiting. We recently observed an unusual reaction after the administration of *iv* dexamethasone in three consecutive patients before induction of general anesthesia. Immediately after receiving a bolus injection of 8 mg of dexamethasone sodium phosphate (Sabex, Boucherville, QC, Canada), the patients experienced perineal burning, itching and tingling. This reaction was short-lived with a duration ranging from 30 to 45 sec. After informed consent was obtained, 20 additional patients (10 males and 10 females) were asked about the occurrence of an unusual sensation after a bolus administration of dexamethasone before induction of general anesthesia (Table). All females reported the same reaction, while only three males were affected.

Intravenous dexamethasone-induced perineal pruritus has been described in association with antiemetic use in chemotherapy,[1] in the setting of acute head injury secondary to blunt trauma in an attempt to reduce intracranial pressure,[2] and as an anti-inflammatory agent in the perioperative course of oral surgery.[3] We are not aware of any similar reports in the anesthetic literature. The incidence of this reaction has not been clearly defined but could range between 25 to 100% depending on the dose and speed of administration.[1–5] We observed that females seem more at risk of presenting this adverse effect, a finding that has been already described in the literature.[3,4] The pharmacological mechanism explaining this phenomenon remains poorly understood, but could be related to the phosphate ester of the corticosteroid since perineal irritation has been described with hydrocortisone-21-phosphate sodium and prednisolone phosphate.[1] Fortunately, this adverse effect can be diminished or even abolished by giving dexamethasone diluted in 50 mL of fluid over five to ten minutes.[1,3,5]

In conclusion, anesthesiologists should be aware of this unusual adverse reaction. The slow *iv* infusion of diluted dexamethasone seems to prevent perineal irritation and patient discomfort.

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TABLE Perineal pruritus after *iv* dexamethasone administration

Sex (M/F)	*Weight (kg)*	*Age (yr)*	*Dose (mg)*	*Pruritis (±)*	*Onset (sec)*	*Duration (sec)*	*Location*
F	68	43	6	+	30	30	vagina
F	63	39	6	+	25	40	vagina
F	51	24	6	+	30	40	vulva, vagina
F	72	44	8	+	35	30	vagina
F	80	29	8	+	40	25	anus, vagina
M	56	31	6	-	-	-	-
M	86	42	8	-	-	-	-
F	74	46	6	+	20	30	vulva
M	83	40	6	-	-	-	-
M	81	65	6	-	-	-	-
F	62	56	6	+	30	30	anus, vulva, vagina
M	77	46	6	-	-	-	-
M	71	54	6	-	-	-	-
F	73	71	6	+	20	30	vulva
F	55	43	5,5	+	40	30	anus, vulva, vagina
F	60	26	6	+	30	35	anus, vulva, vagina
M	82	17	8	+	40	20	anus
M	82	18	8	-	-	-	-
M	88	40	9	+	25	40	anus, scrotum
M	80	15	8	+	30	30	anus, penis

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Spontaneous spinal hemorrhage complicating anticoagulant therapy

To the Editor:

We report a relatively rare but potentially devastating hemorrhagic consequence of anticoagulation therapy that can lead to spinal cord injury (SCI). The precise incidence of SCI from intraspinal hematoma is unknown, though it is clearly low.[1–3] Spinal anesthesia is a risk factor for this complication.[4]

A 61-yr-old man was taking acenocoumarol 4 mg orally following an aortic valve replacement. The prothrombin time (PT) was maintained at 1.5 times the control value. Four years after the operation, he complained of severe neck pain, numbness and weakness of the legs and headache with sensory deficits and urinary retention. No trauma occurred in the days preceding his neurologic symptoms. Acenocoumarol therapy was discontinued, and 10 mg of vitamin K were administered intravenously. A C7–D4 subdural hematoma was revealed by magnetic resonance imaging (Figure). Anticoagulation was reversed immediately with 250 mL of fresh frozen plasma (FFP) and an emergency decompressive laminectomy performed to remove the D1–D3 subdural hematoma. Postoperative recovery was complete ten days later.

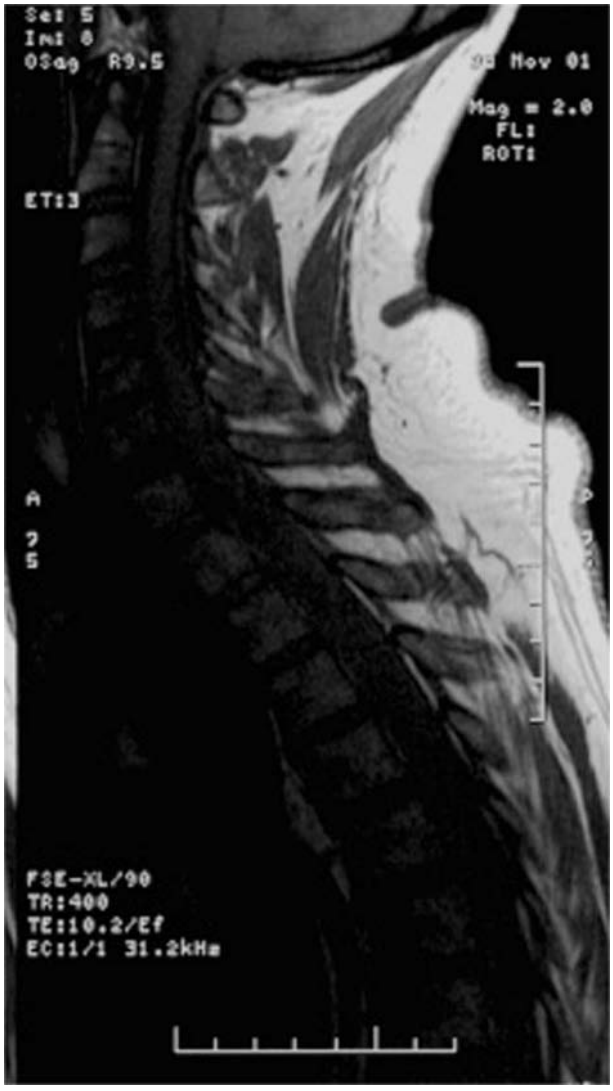

FIGURE The C7–D4 subdural hematoma revealed by magnetic resonance imaging.

Unlike intracranial hemorrhage, which is usually subdural, intraspinal hemorrhage usually occurs in the epidural space. Intraspinal hematomas have been associated with the use of oral anticoagulant agents and heparin, antiplatelet therapy, trauma, straining, and lumbar puncture.[2,3] Typically, the first complaint is of severe pain, often with a radicular component. Neurologic deficits follow intraspinal ruptures. Although they usually progress over several hours, they may develop in minutes or days and should be investigated immediately. There is no difference between spontaneous and anesthesia-related spinal hematomas.[4]

Suspicion of intraspinal bleeding establishes a crisis situation. The decisions made at the discovery of the first signs and symptoms will ultimately determine