

On-line Table 1: Survey Questions

Questions
1) Do you routinely discontinue medications (antipsychotics and antidepressants) known to lower the seizure threshold in patients prior to myelography? a) Yes b) No
2) In the last 5 years, have you ever had a patient experience a seizure following myelography that you attributed to the combination of the medication and the intrathecal contrast? a) No b) Yes, in 1 patient c) Yes, in 2–5 patients d) Yes, in more than 5 patients
3) How long do you monitor your patients after myelography in a postanesthesia care unit or same-day surgery type environment? a) Less than 30 minutes b) 30 minutes to 2 hours c) 2–10 hours d) More than 10 hours, less than 24 hours
4) What type of contrast materials do you use for myelography? a) Ionic contrast agent b) Nonionic iso-osmolar agent (ie, Visipaque [iodixanol]) c) Nonionic hypo-osmolar agent (ie, Isovue M [iopamidol], Omnipaque [iohexol])
5) How would you describe your practice? a) Academic b) Private practice c) Hybrid d) Other (please specify)
6) How long have you been in practice? a) <5 years b) 5–10 years c) 10–15 years d) >15 years

On-line Table 2: Years in practice and observation of postmyelographic seizure—percentage (No.) of practitioners, divided into groups by years in practice, who had patients who experienced seizures

Years in Practice	Discontinue STLMs	Observed Postmyelographic Seizure
<5 (n = 102)	62% (63)	4% (4)
5–10 (n = 123)	57% (70)	6% (7)
10–15 (n = 88)	53% (46)	1% (1)
>15 (n = 382)	57% (217)	3% (11)

On-line Table 3: Literature review of postmyelographic seizures using iohexol and lopamidol

Pt No.	Authors	Total No. of Patients	Clinical Symptoms	History of seizure?	Spine Segment	Contrast Agent	Contrast Volume	Concomitant Seizure Threshold-Lowering Medications
1	Ahmed et al ⁵	Not reported	Acute confusional state	No history of seizure	Lumbar	Metrizamide	12 mL (80 mg/dL)	Not reported
2	Ahmed et al ⁵	Not reported	Acute confusional state	No history provided	Lumbar	iohexol	Not provided	Not reported
3	Alimohammadi et al ⁶	Not reported	Lower extremity myoclonic spasms	No history of seizure	Lumbar	iohexol	18 mL (240 mg/mL)	No seizure-lowering meds
4	Altschuler and Segal et al ⁷	Not reported	Generalized seizures	No history of seizure	Lumbar	iohexol	12 mL (240 mg/mL)	1 Medication known to cause seizure (propoxyphene)
5	Bassi et al ¹⁰	1138	Convulsions and fasciculation	Not reported	Not reported	lopamidol	Not reported	Not reported
6	Canbay et al ⁶⁶	Not reported	Myoclonic spasms, disseminated intravascular coagulopathy	No history of seizure	Thoracic and lumbar	iohexol	10 mL (300 mg/mL)	Not reported
7	Carchietti et al ¹³	Not reported	General epileptic seizure	Not reported, history of chronic alcoholism	Lumbar	lopamidol	8 mL (300 mg/mL)	Anxiolytics
8	Carella et al ¹⁴	Not reported	Aphasia	Not reported	Lumbar	Metrizamide	20 mL (250 mg/mL)	Not reported (lopamidol myelo 1 week prior)
9	Carella et al ¹⁴	Not reported	Generalized seizures	Not reported	Cervical	lopamidol	20 mL (300 mg/mL)	Not reported (metrizamide myelo 3 mo prior)
10	Carella et al ¹⁴	Not reported	Lower extremity clonic jerks	Not reported	Lumbar	lopamidol	20 mL (300 mg/mL)	Not reported
11	Dalen et al ¹⁵	Not reported	Facial twitches, upper extremity spasms	No history of seizure	Lumbar	iohexol	10 mL (240 mg/mL)	No seizure-lowering meds
12	Grunert and Pendl ⁵⁴	1070	Generalized seizure, myoclonic lower extremity jerking	Not reported	Lumbar	lopamidol	Not reported	Not reported
13	Kelley et al ⁶⁷	Not reported	Increased somnolence	No history of seizure	Lumbar	lopamidol	10 mL (300 mg/mL)	No seizure-lowering meds
14	Klein et al ¹⁹	1350	Tonic-clonic seizures	No history of seizure	Lumbar	lopamidol	10.2 g	Not reported
15	Klein et al ¹⁹	1350	Tonic-clonic seizures	Yes (on antiepileptic agents)	Cervical	lopamidol	10.2 g	Not reported
16	Klein et al ¹⁹	1350	Tonic-clonic seizures	No history of seizure	Cervical	lopamidol	10.2 g	Not reported
17	Levey et al ²⁰	785	Generalized seizures	History of alcohol abuse, 1 seizure	Lumbar	lopamidol	15 mL (200 mg/mL)	No seizure-lowering meds
18	Levey et al ²⁰	785	Generalized convulsions	History of seizure disorder, had not taken meds for 6 yr	Lumbar	lopamidol	15 mL (200 mg/mL)	No seizure-lowering meds
19	Levey et al ²⁰	785	Generalized tonic-clonic seizures	No history of seizure	Cervical	lopamidol	15 mL (300 mg/mL)	No seizure-lowering meds
20	Lipman et al ²¹	236	Generalized seizures	No history of seizure	Cervical	lopamidol	10 mL (300 mg/mL)	No seizure-lowering meds
21	Lipman et al ²¹	236	Grand mal seizure	No history of seizure	Lumbar	lopamidol	12 mL (200 mg/mL)	No seizure-lowering meds
22	Olsen ⁵⁰	Not reported	Generalized tonic-clonic seizures	No history of seizure	Lumbar	lopamidol	15 mL (200 mg/mL)	No seizure-lowering meds
23	Singh et al ²⁵	Not reported	Generalized tonic-clonic seizures	No history of seizure	Cervical	lopamidol	15 mL (300 mg/mL)	Not reported
24	Sobel et al ⁶⁸	152	Seizure	Not reported	Not reported	lopamidol	Up to 4.5 g l	Not reported
25	Tahta et al ²⁶	Not reported	Tonic-clonic seizures	Not reported	Lumbar	iohexol	15 mL (300 mg/mL)	Not reported
26	Teasdale and Macpherson ⁶⁹	300	Seizure	Not reported	Cervical	lopamidol	7 mL (250 mg/mL)	Not reported
27	Teasdale and Macpherson ⁶⁹	300	Seizure	Not reported	Cervical	lopamidol	7 mL (250 mg/mL)	Not reported
28	Vossler and Wright ²⁷	Not reported	Convulsive status epilepticus	History of intracranial hemorrhage, arteriovenous malformations, no history of seizure	Skull base	lopamidol	15 mL (300 mg/mL)	Dapsone with rare reported incidence of seizure

Note:—Pt indicates patient; meds, medications; myelo, myelography.