By 1979 the new dye, Amipaque, had redefined the myelography market, which was a source of concern to **Alcon**, no doubt.

During this period, Newton at Lafayette, sent an internal memo concerning a conversation he had had with a physician enquiring on behalf of his daughter.

He mentioned saying that

"retained Pantopaque should present no problem"

but

"would gradually be eliminated".

He recalled also saying

"*We had not seen inflammatory responses in animals".*

Newton has also mentioned that in the UK, Pantopaque was routinely being left in the subarachnoid space as standard practice.

I guess one out of three of his assertions could be said to be true, although not the full story, bearing in mind the package inserts for the product his company were distributing.

In the same year, Jensen et al. ([1]) published a paper in the journal Neuroradiology of a case of obstructive hydrocephalus; the authors described features typical of the Pantopaque reaction seen in animals.

They described postmortem findings of occlusion of the foramina of Magendi and Luschka by granulation tissue and inflammatory features typical of Pantopaque reaction.

In January 1979, Rinaldi et al. ([2]) published a paper in the New England Journal of Medicine (NEMJ) on the contamination of iophendylate by glass.

They later published a similar paper in another journal ([3]) on the same subject, describing how fragments of glass from ampoules of Pantopaque might be injected into the spinal fluid along with the dye.

Occhiogrosso et al. ([4]) described a case of unusual complication of iodised myelography: late onset blindness.

Portuguese authors Perpetuo and Hurtado ([5]) reported a case of diabetes insipidus after Pantopaque myelography.

Other papers in 1979 included: Erickson ([6]) on arachnoiditis due to Pantopaque (in the journal Spine) and Lichtenstein (also in Spine) on arachnoiditis following myelography ([7]).

Iophendylate was also being used for other purposes: Cromwell and Kerber ([8]) described its experimental use in therapeutic embolisation.

Deeb and Rosenbaum ([9]) wrote about intravasation into the epidural venous plexus as an adverse effect of myelography, causing transient pulmonary symptoms.

---

[1] Jensen F, Reske-Nielsen E, Ratjen E. *Neuroradiology*. 1979 Sep 26; 18(3): 139-44. Obstructive hydrocephalus following Pantopaque myelography.

[2] Rinaldi I *N Engl J Med*. 1979 Jan 11; 300(2): 95-6. Contamination of iophendylate by glass.

[3] Rinaldi I, Gendron FG, Peach WF Jr, Harris WO Jr, Kopp JE, Reagan TJ, Botton JE. *Surg Neurol*
1979 Apr; 11(4): 295-7 Contamination of Pantopaque by glass.

[4] Occhiogrosso M, Troccoli V, Vailati G. *Acta Neurol (Napoli).* 1979 Feb; 1(1): 76-8. A rare complication following iodized myelography: late blindness. Case report.

[5] Perpetuo FO, Hurtado PS. *Arq Neuropsiquiatr* 1979 Mar; 37(1): 85-8 [Diabetes insipidus after myelography. Report of a case]

[6] Erickson D *Spine* 1979 May-Jun; 4(3): 279-80 Arachnoiditis caused by Pantopaque

[7] Lichtenstein RS *Spine* 1979 Jan-Feb; 4(1): 93-4 Arachnoiditis following myelography

[8] Cromwell LD, Kerber CW. *AJR Am J Roentgenol* 1979 May; 132(5): 799-801 Modification of cyanoacrylate for therapeutic embolization: preliminary experience.

[9] Deeb ZL, Rosenbaum AE. *Surg Neurol* 1979 Sep; 12(3): 259-60 Opacification of the lumbar epidural venous plexus during myelography.