

Strangely enough, the 1971 DESI review of Pantopaque failed to highlight the dangers of the product, perhaps because it was aimed principally at efficacy rather than safety.

1971 was also the year in which the Drug Bulletin and the National Drug Experience Reporting System were set up in the USA and when **Glaxo** changed their package insert to include warnings about adverse effects such as arachnoiditis.

They concluded, however,

"the sporadic nature of reports, and sometimes the sparseness of information about the patient's condition prior to myelography make it difficult to evaluate the role of iophendylate.

However, **these reports probably add weight to the case for removing as much Myodil as possible."**

The DESI concluded that Pantopaque was widely used and the current agent of choice in myelography, although this seems to have been on the basis of only one cat study and it seems most unlikely that the reviewers had access to the 15-week intrathecal dog study results.

The review noted that severe arachnoiditis arose "infrequently" and that there was a **much-increased incidence in the presence of subarachnoid bleeding** which necessitated deferring the procedure under those clinical conditions.

As regards the labelling review, the DESI were somewhat more stringent.

It was noted that the insert claimed incorrectly that residual medium was absorbed within two

months; the DESI recommended that this should be deleted as in fact the residual remains present for many years. (We can now say, in effect, permanently)

During 1971, Clark ([\[1\]](#)) conducted a study of ventriculography in dogs with severe hydrocephalus, demonstrating that if CSF flow was impeded, severe brain damage occurred.

Clark outlined the potential dangers of Pantopaque, commenting on the lack of research thus far on its toxicity.

Clark commented:

“The fact that Pantopaque has been used for 24 years in ventriculography and 26 in myelography with only a relatively small number of reported unfavourable reactions, may be imparting a false sense of security.”

He noted:

“The research showed the devastating effects (of Pantopaque/Myodil) on the brains of the animals and emphasized the potential dangers of Pantopaque clinical use.”

Bergeron et al. ([\[2\]](#)) published their study on monkeys, which demonstrated that there was **always some reaction with retained Pantopaque and that therefore as much dye as possible should be removed** after the examination.

[\[1\] Clark RG, Milhorat TH, Stanley WC, Di Chiro G.](#) J Neurosurg. 1971 Mar; 34(3): 387-95
Experimental Pantopaque ventriculography.

[2] [Bergeron RT, Rumbaugh CL, Fang H, Cravioto H.](#) *Radiology*. 1971 Apr; 99(1): 95-101
Experimental Pantopaque arachnoiditis in the monkey.