SUBARACHNOID BLOCK WITH CRYSTALLINE PONTOCAINE

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Pontocaine hydrochloride, formerly available only in solution, is now produced in the form of crystals.* As such it appears to possess certain advantages. We have administered this preparation to 100 patients for the production of subarachnoid block, and although one can record only impressions from such a small series, the results are presented in the hope that others may be stimulated to try this agent.

The crystals, when dissolved in spinal fluid and injected, produce an immediate effect. This stands in contrast to pontocaine solution, which not infrequently requires ten to fifteen minutes before the onset of analgesia. Also, this mixture of spinal fluid and crystals is only slightly heavier than spinal fluid alone, so that in all probability, following a three to five minute interval immediately after the injection, the patient can be placed in the desired position at any time. During this interval the patient should be placed in the supine position with a small pillow under the head. This is, in itself, a considerable advantage

From the standpoint of toxicity, we can again report only impressions, for 100 administrations is not enough to be treated otherwise. It appears, however, that in this respect crystalline pontocaine compares favorably with procaine. At least in this series there was a lower incidence of nausea, and we noted fewer profound decreases in blood pressure.

The dosage required, the site of administration and the duration of analgesia can best be illustrated by the following tables.

Length of Anesthesia and Supplementary Anesthesia

	No. of Cases	Supplemented	No Supplement
1 hr. or less	43	6	37
1 to 1½ hrs.	34	10	24
1½ to 2 hrs.	12	7	5
2 to 2½ hrs.	8	5	3
2½ to 3 hrs.	1	1	0
3 to 3½ hrs.	2	2	
Totals	100	31	69

* Pontocaine Niphanoid—Winthrop.

Dosage

	Number of Cases	Average Dose	Average Dilution	Site of Injection
Transurethral resections	15	14.6 mg.	2.25 cc.	8 in 3rd lumbar interspace 2 in 4th 5 not recorded
Hernias, and other extraperitoneal	16	16.4 mg.	3.0 cc.	6 in 2nd 7 in 3rd 3 not recorded
Lower abdom. laparotomies	55	17.95 mg.	3.3 cc.	24 in 2nd 11 in 3rd 20 not recorded
Upper abdom. laparotomies	14	18.86 mg.	3.66 cc.	9 in 2nd 1 in 3rd 4 not recorded

Recently we have been using smaller doses than those shown in the table, particularly for patients undergoing prostatic resection. For these individuals, 8–12 mg. has been sufficient. It is also to be noted that in making up these averages a certain percentage of patients classed as good risks were included, upon whom extensive elective surgery was planned. A twenty milligram dose was frequently selected for these, in order to insure two to three hours of anesthesia. The figures for average dosage must therefore be reduced considerably when one is considering the acutely ill patient or one classed as a substandard risk.

The table indicates that only a slight increase in dose is made for operations in the upper abdomen. We do not seek full sensory control in such cases, preferring to supplement many of our subarachnoid blocks with inhalation agents.

Conclusions

Crystalline pontocaine is worthy of further trial for the production of spinal anesthesia. A small series of cases is reported, on the basis of which the author concludes that this preparation results in prompt anesthesia, which persists for one and one-half to two hours, and does not appear to be accompanied by an increase in toxicity.

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