

comes to the conclusion that we can get about 85 per cent. of painless labors by this method, that there are certain definite contra-indications and that its disadvantages are slight and become less with experience.

Last July we began this work in the wards of the Toronto General Hospital, where we are still carrying it on. We had expected to report 100 cases at this meeting, but owing to the departure of Dr. Gallie for the front, we are only able to give our results with 80 patients. Our early cases were both private and public, but the added work due to the absence of so many men from the hospital have resulted in all the later ones being only those in private practice, as we found it impossible to give the time for proper supervision to any others. The results, however, of these later cases are a great deal better than those early in our series, possibly partly on account of added experience, but also to a great degree due to the fact that the conditions surrounding private obstetrical cases are a great deal better for the proper conduction of this method of treatment.

When beginning our work the drugs first used were scopolamine hydro-bromide as put up by Poulenc Freres in aseptic glass ampules containing .0003 grms. of the drug. We also used morphine hydrochloride put up by the same firm in ampules of .01 grm. On the outbreak of the war we found it impossible to renew our supply of these drugs. After trying the products of several firms, we finally employed the tablets put up by Burroughes Welcome & Co., each containing 1/100 gr. There is apparently considerable confusion regarding the question of the identity of scopolamine and hyoscin. The B.P. and the U.S.P. give them as identical. Chemically they are, but investigation has shown that alkaloid exists in three stereoisomeric forms: dextro-rotary, lævo-rotary, and a racemic form. The lævo-rotary substance is said to act more strongly on the peripheral nerve endings, and this is the drug to which the term "scopolamine" is applied. This form is found in both the scopol and hyoscyamous plants, but is liable to be converted into the other, more inert form, in the process of manufacture. We have been assured that the tablets we are using contain the lævo-rotary drug, and certainly our results are as good as those we obtained with the product used at first.

The action of scopolamine is said to be chiefly upon the central nervous system, quieting the cerebral centres without apparently influencing the contractility of the uterus. It has no power to relieve pain, but tends to produce sleep, disorganize the higher centres and takes away from the patient the ability to correlate events.

The method of giving these drugs aims not at abolishing pain, but only the memory of pain. The patient when in the proper condition