prisingly few considering the dose. It is to be noted the difference between the doses they used and those considered necessary in ordinary obstetric work.

The pharmacological action of scopolamine has been rather fully investigated by Stella (17), Kochman (18), Webster (12) and others, but we are sorry to say with rather contradictory results. The reason of this is probably because of the rather peculiar idiosyncrasy that the animals generally used in experiments have to the action of scopolamine or the allied drugs atropine, duboisin, etc. It has been found by these experiments that dogs will stand enormous doses of these drugs without apparently any bad effects, while on the contrary man seems, in some cases, to be peculiarly susceptible.

As an example of how resistant dogs are to hyoscine and atropine, we might mention an experiment performed in conjunction with Dr. Webster. We injected into the vein of a dog of fifteen pounds, hyoscine, gr. 1-100; five minutes later gr. 2-100, and five minutes later gr. 4-100; then at intervals of five minutes atropine, gr. 1-20; gr. 1-10; gr. 3-20; gr. 3-10; gr. 6-10, and gr. 1 1-2. At the end of an hour the dog had received hyoscine, gr. 7-100, and atropine, grs. 2 6-10. The dog recovered, and a week afterwards we gave the same dog 1 1-2 gr. of atropine at one dose. The animal recovered from that, so we killed it with chloroform. Dr. Webster, though, tells us that he has killed dogs with an initial dose of hyoscine, gr. 1-100. The animals, if they survive the initial dose, seem to acquire an immunity to the drug, and it can be increased at five-minute intervals without much effect.

In man, one case is recorded in which there was a death after administering gr. 1-20 of scopolamine, but in this case there was a high grade of arteriosclerosis.

The combination of morphine and scopolamine no doubt owes its efficiency as an anesthetic, without unduly depressing the circulation, to the supposed antagonistic action of morphine and scopolamine on the respiratory and circulatory centres.

Atropine has long been used as an antidote for morphine poisoning, and, as proven by Webster and other observers, atropine, scopolamine and hyoscine are practically identical in their action on the circulation and respiration. The reason for the use of scopolomaine or hyoscine, in preference to atropine is, hyoscine and scopolamine have a more sedative effect than atropine. Quite recently Nicholson (37), of St. Louis, has done a number of experiments on animals. He found that by injecting morphine, gr. 1-4, and scopolamine, gr. 1-100, into a rabbit it produced a deep narcosis followed by recovery in four or five hours. Inject-