twenty-six cases the patients complained that the injection was extremely painful painful, in thirty-two cases they stated that there was slight pain produced, and forty-two cases testified to entire freedom from pain. Finally, the author classifies his conclusions as follows:

1. Subcutaneous injections of antipyrin, as regards the production of local pain, is of the most varied action, the result evidently depending upon the individual disposition of the patient.

2. No difference between the first and subsequent injections can be made out.

3. When ever possible, the injection should be made into the tissue of the muscles, since in this locality it is, at any rate, no more painful than in the subcutaneous tissue, and infiltration is avoided.

4. Previous injections of cocaine are to be recommended.

5. As recommended by Liebreich at the last Wiesbaden Congress, the injection should be made as near as possible to the seat of the pain. An apparent exception to this rule is found in the fact that in hemicrania and orbital neuralgia relief will frequently follow with astonishing rapidity the use of injections into the deltoid muscle.

6. There is no probability of antipyrin ever being regarded as a substitute for morphine.

7. Injections of antipyrin arrest pain in hemicrania and in muscular pain, especially in lumbago and neuralgia of the sciatic and trigeminal nerves. In most cases the relief is permanent; in others it lasts from six to eight hours.

8. In articular rheumatism it seems to be almost a specific, as, in the single case in which it failed to give relief, failure can be regarded as attributable to the complications existing in the case.

9. No difference is evident as regards its influence upon acute or chronic pain; it appears to act equally well in both cases.

10. The five cases in which chills, cold sweat palpitation of the heart, and symptoms of syncope followed its use show that its employment should be carefully watched, although in no case were the symptoms severe enough to cause any anxiety. Since in none of these cases was cocaine injected with the antipyrin, the results are attributable to the latter alone.

11. Only in the rarest instances will these injections fail to produce some improvement.

In most cases the author employed a solution of antipyrin made in boiling distilled water. In other cases he employed a solution consisting of one hundred and fifty grains each of antipyrin and water in which three grains of cocaine were dissolved, the latter solution being ordinarily less painful in its employment.

It is to be regretted that the author has not in any case given more accurate statements as to the dose which he employed, other than saying that he had employed a syringeful of these solutions.—*Therap. Gaz.*

AMYLENE HYDRATE IN EPILEPSY.

New and effective remedies in the treatment of epilepsy are very much needed. From time to time many such have been suggested; but the hopes inspired by the assertions of their advocates have been dashed to the ground. Amylene hydrate is one of the most recent claimants for favor. In the *Neurologisches Centralblatt*, No. 15, Dr. H. A. Wildermuth, of Stuttgart, has an interesting communication giving the results obtained by him in sixty-six cases of epilepsy which were treated with amylene hydrate. From the *Wiener med. Presse*, August 25, 1889, we gather that the patients were about equally divided as regards sex, thirty being men and thirty-six women. The result is said to have been favorable in the majority of the cases, and in some instances the disease seemed to be absolutely aborted. As regards the quantity of the drug given, Wildermuth says that from thirty to forty-five minims were given at a dose, or from seventy-five to one hundred and twenty minims in the day. After a number of trials it was found most suitable to make a watery solution of the amylene hydrate, of the strength of one part in ten, of which solution from five to ten teaspoonfuls were given at a dose, in diluted wine or fruit juice. The character of the disease appears to have offered a severe test of the efficiency of the remedy; for with one exception the patients have been affected with epilepsy for years, and had been previously treated for a long time with bromides —the bromide of potash alone, or a mixture of the salts of bromine. In addition to the bromides, most of the patients had also received atropine, or pills of zinc and belladonna. The administration of the pills was discontinued immediately upon beginning the amylene treatment. The bromides, however, were not stopped at first, but were only lessened in quantity at very short intervals; and if, in spite of this, the favorable result apparently due to the amylene hydrate continued, the bromides were no longer given in any amount.

The results appear to be of special interest in cases in which there were a number of attacks at one time, which by other means we are often powerless to overcome. In such cases, Wildermuth states that one or two subcutaneous injections of the drug were found preferable to its administration in any other way. No bad secondary effects of any kind were observed in the employment of the drug in the manner described in the *status eptilepticus*; but when it