of *Bact. coli*. The organism was found to be present. Both strains were found sensitive to sulphathiazole and chloramphenicol.

Treatment.—While investigations were being made, both patients were treated symptomatically with kaolin. This had no effect, for the condition recurred under my observation—that is, normal bowel action for five days was followed by pain and loose discoloured stools for two days.

I gave a seven-day course of sulphathiazole. During this treatment symptoms were absent, but at the end of treatment the specific strain of *Bact. coli* was still present, and a week later the condition relapsed. Chloramphenicol was then given, diarrhoea ceased at first but returned after five days' treatment (possibly due to the drug). I then instituted a combined course of chloramphenicol and sulphathiazole extending over ten days. Diarrhoea stopped and pains ceased. A week after the end of this treatment, specimens from both children were negative. Further specimens remained negative. After three months both children were well.

COMMENT

Two children, aged 2 years and 1 year respectively, suffered from recurrent diarrhoea and colic. Repeated faeces examinations revealed none of the usual intestinal parasites or pathogens, but a sero-specific strain of *Bact. coli*, Type O.26.B.6, known to be associated with infantile gastro-enteritis, was repeatedly isolated from the faeces of both children, and not until the organism had disappeared from the stools after a course of sulphathiazole and chloramphenicol did clinical recovery take place. Specimens examined from the unaffected members of the household were consistently negative for *Bact. coli* O.26.B.6.

It therefore seems worth while to consider such organisms when investigating cases of diarrhoea even after the age of infancy.

I am grateful to Dr. M. Thomas, of the Public Health Laboratory, Edmonton, for examining the faeces specimens from these cases.

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Acute Psychotic Reaction after Inhaling Methylamphetamine

The following case is reported because of its unusual psychiatric interest and also to indicate a possible danger in the indiscriminate use of the amphetamine group of drugs by inhalation of the vapours.

There appear to have been no similar cases reported in the literature or known to the manufacturers of these inhalers. There have, of course, been many cases of addiction and even of psychosis associated with ingestion of amphetamines, and in this connexion inhalers are often used as a ready source of the solid drug.

CASE REPORT

A man aged 41 was admitted on July 8, 1951, to a mental hospital on an urgency order. Physical examination revealed a robust healthy man. He was rather flushed and sweated readily; pulse 100; blood pressure 150/92. There were a few rhonchi in both lung fields. Further investigations showed him to have nasal polypi and chronic maxillary antritis. The urine contained traces of sugar and acetone. The Wassermann reaction and Kahn test were negative. Mentally he was well orientated, but acutely hallucinated both visually and aurally. He was anxious and had severe insomnia. His pockets contained five "methedrine" inhalers, which before use had each contained 250 mg. of methylamphetamine base.

On July 11, after rest and sedation, he was much improved and able to give the following history. He was an Irish unskilled worker who had been separated from

his wife and living alone in this country for many years. He denied alcoholism and any previous mental illness in himself or his relatives. On the evening before admission he had felt unwell and had used his inhalers to relieve his nasal congestion. He often used them three or four times an hour, and thought that on this occasion he may have inhaled as often as every five or ten minutes. He admitted that they gave him a pleasant feeling, described as a "lift" with something sexual about it. After a few hours he had noticed that he "saw" women and animals in the room, although he realized they were unreal.

These hallucinations were in bright colours and were rather diminutive. He also described an illusion in which a coat over a chair "turned into a woman." He had the feeling that these happenings were supernatural, and seeing some shadows at the window of a house opposite he got the idea that he was being hypnotized. He went over the road to investigate and called in the police. It was this that led to his admission to hospital.

By July 15 he had completely remitted, but voluntarily remained in hospital in order that certain tests could be carried out. He appeared intelligent and informative, if not garrulous, but gave the impression of being a rather unreliable witness. His affect was cheerful and congruous, but a little shallow. The hallucinations had gradually disappeared over four to five days.

A Rorschach test was carried out on July 26. With full co-operation the patient could produce only 13 responses. His intelligence was tested on a shortened Wechsler verbal scale; it gave an I.Q. of 120. It seemed likely that his meagre and constricted Rorschach record was due to an "accuracy compulsion" so powerful as to inhibit his ability to make anything of the ink-blot.

On July 27 he was given 30 mg. of methylamphetamine intravenously. He became flushed, his pulse rose to 120, and his blood pressure to 190/120. He expressed a feeling of well-being and a desire to "get up and do things." He stated that marks on the ceiling became more conspicuous and that when he looked up at a certain object he felt as if it looked back at him. Colours appeared to change and he had erotic sensations. He later remarked on the similarity of these feelings to those following methedrine inhalation.

In 30 minutes he appeared to have recovered and was subjected to a second Rorschach test. The number of responses had risen to 47, considerably more than is usual, in spite of the compulsiveness being still very marked. He left hospital the next day, but later claimed that the injection test had produced hallucinations lasting for several days, which he had kept quiet about.

Six weeks later he had a third acute hallucinatory episode following the further use of inhalers. He then underwent an operation for removal of his nasal polypi and has apparently remained well since.

COMMENT

There seems to have been established in this case a causal relationship between methylamphetamine absorbed by inhalation and an acute psychotic reaction. The drug was, of course, used in excess of the recommended dose. Also it appeared that the man's previous personality was such as to predispose to psychotic breakdown and possibly to addiction. The illness was at first thought to be an acute schizophrenic episode, but was subsequently diagnosed as an acute organic confusion, although confusion in the sense of severe disorientation was singularly lacking. However, the overactivity and the paranoid element were fairly typical of previously described amphetamine psychoses. It is thought possible, in view of the time lag of a few hours after injection before the occurrence of definite hallucinations, and their persistence for several days, that the psychotic reaction may not have been directly due to the action of the drug on the higher centres, but to a withdrawal or exhaustion phenomenon.

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