CORONARY OCCLUSION IN A PATIENT AGED TWENTY-FOUR YEARS

BY

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Though the diagnosis of coronary thrombosis is made in increasing numbers at the present time, I have not come across any case in the literature available here where it has occurred below the age of 25 years. The case described below will be of interest on that account.

Case Record

Mr. J., aged 24, is an unmarried Cingalese. He is a well-built athletic young man accustomed to hard physical exercise. He plays cricket, Rugby football, and tennis, and is an enthusiastic boxer and athlete. He was in perfect health up to the date of his illness, which started on March 17th, 1934. On that day he felt particularly dull, and instead of his usual routine on a Saturday afternoon, he slept from 1 p.m. to 5 p.m. He then had a cold bath, and rode out on a motor cycle for about half an hour. At 9.30 p.m. he had his usual dinner of rice and curry, but for some reason he had to rush through it and immediately afterwards engage in some physical work. He retired to bed at 10.30 p.m.

He was in bed for about a quarter of an hour when he noticed he was getting giddy and felt dazed. He felt "lifeless" in his left upper and lower extremities. At the same time he noticed he could not see distinctly—"he was looking through a haze." This attack lasted about five minutes and was not accompanied by any pain. He soon felt quite well, but after five minutes he had a second attack. This time the symptoms were more severe. He became breathless and found difficulty in both inspiring and expiring, as if—to use his own words—something was obstructing the airway. At the same time he experienced severe pain which was strictly localized to the left nipple area. It was a "stabbing pain" with severe exacerbation synchronous with the heart-beat. There was also slight pain which ran down the inner side of the left arm. At the same time he felt, as he described it, "lifeless in the whole body." In a few minutes the pain and breathlessness became steadily worse. He left his bed and walked about. He felt sick and vomited once, and involuntary defaecation occurred. He felt some slight relief when walking about, but the pain did not leave him, and so he again got into bed. For the rest of the night he was in much the same condition; towards morning he felt much better, the severity of the attack becoming progressively diminished.

He saw a doctor in the morning, when he was given a belladonna plaster to his chest and a mixture. This latter he could not retain. He felt better during the day (March 18th), although the symptoms were there in slight form. He had a temperature the whole of that day. At about 9.30 p.m. the symptoms came on again, and soon became severe. He entered the General Hospital, Colombo, early next morning under the care of Dr. E. Garvin Mack.

As regards his family history, his mother died at the age of 45 of a heart attack. It came on at night quite suddenly, and lasted five to ten minutes, during which she had severe pain and dyspnoea. She soon became unconscious and died. His father, aged 65, is in very good health.

Condition on Examination.—The patient is a well-built, athletic young man. The apex beat was $3/4$ in. outside the mid-clavicular line in the fifth space. There was no appreciable enlargement to the right. The pulmonary second sound was reduplicated, and there was a systolic bruit at the inner end of the fourth left interspace. The pulse was 100, regular; the blood pressure 100/75. There was nothing abnormal detected in the lungs, liver, spleen or genito-urinary system. The bowels were regular. The temperature on admission was 100° F., but in the course of the day went up to 103°. For another six days he had a temperature ranging between 99° and 103°. His blood was examined for the Wassermann reaction, and gave a negative result. There was no history of exposure to syphilitic infection. A total white cell count done on March 28th gave 10,400 per c.mm.

An electrocardiogram (not shown) was taken on March 23rd, and repeated on two subsequent occasions. In the first, taken six days after the attack, the S-T interval is raised above the base line in Lead I, and the R-T interval depressed in Lead III. There are no T waves in these two leads, while in Lead II the T is inverted. In the second, taken on April 12th—that is, twenty-five days after the attack—the S-T interval is coming down to the base line, and the T wave is seen inverted in Lead I while the T is getting back to normal in Lead III. In the third one, taken one month and twenty-four days after the attack, the T wave is inverted, and there is notching of the S wave in Lead I, while in Leads II and III the T waves have come back to normal.

Treatment and Progress.—On admission the patient was given morphine, $1/4$ grain, by injection. He was in addition put on lacarnol (Bayer), 15 drops three times a day. His further progress was as follows. March 20th: feeling much better; temperature between 101° and 103°, and dull pain over the praecordium. April 5th: there were occasional attacks of pain along the left arm. April 10th: occasional attacks of discomfort in the chest; blood pressure 110/80.

April 25th: the chest was x-rayed, and the radiologist reported enlargement of the left ventricle. May 14th: the patient had been very much better for about a month. He had had occasional attacks of slight discomfort in the chest, which came on when he was lying in bed. They had been very mild. He was now able to get about without pain. The apex beat was in the fifth space just outside the mid-clavicular line. No adventitious sounds were heard: pulse 78, blood pressure 115/80.

The patient was discharged after having been in hospital a little less than two months.

Discussion

This case is reported owing to certain interesting features. (1) The age is very unusual. Though the clinical history and course were characteristic, the diagnosis of coronary thrombosis at the age of 24 might well cause doubt but for the electrocardiographic evidence. (2) Involuntary defaecation has been very rarely observed in cases of coronary thrombosis. (3) His mother died of a similar attack.

It would be interesting to hear the views of those with experience in this subject as to what the probable pathological cause was in a patient so young. Could excessive indulgence in athletics and games have produced degenerative changes in the coronary arteries at an early age? Could the mother's early death from what was perhaps an attack of coronary thrombosis be taken as evidence of a family tendency?

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To perpetuate the memory of Professor A. Boſtock Hill, the Empire Health Week Committee of the Royal Sanitary Institute, of which he was for many years chairman, offers a shield annually for the best celebration of health week in the Empire outside the British Isles. The programmes and reports of the competing centres for the 1934 competition have now been considered and the shield has been awarded to the city of Port-of-Spain, Trinidad.