colonies of *B. paratyphosus* 'A' next day. These 'clumped' with 1 in 10 paratyphoid 'A' serum, and not at all with dilutions of typhoid serum.'"

The case is of interest in showing a typical relapse after fourteen days of convalescence, the blood giving positive cultural reactions, in the occurrence of a roseolar eruption during the relapse, and in the absence of tonsillitis and tenderness over the region of the gall-bladder—so often seen early in paratyphoid fever—and the absence of enlargement of the spleen. Other points which one notes on inspecting the chart are the comparatively slow pulse-rate, even at the height of the fever, and the marked daily remissions in the temperature before finally becoming normal.

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**A PECULIAR CASE OF HÆMOPTYSIS.**

**BY LIEUTENANT JAMES C. SPROULE.**

*Royal Army Medical Corps.*

I HAVE recently had a patient under my charge who suffered from hæmoptysis, and the interesting relationship which the condition bore to her menstrual periods appears to me to make the case worthy of record. The woman, aged 42, is the wife of a serjeant, and I was called to see her on June 27, 1913, as she was spitting up considerable quantities of blood. The patient's previous history reveals no serious illness. She had her first menstrual period at 15 years of age, when she spat up a little blood. She always had slight hæmoptysis at each period till she was 27 years old, when the hæmoptysis on one occasion was so severe that a doctor had to be called in. Slight hæmoptysis occurred at each menstrual period thereafter. The periods were always regular, lasting four days. The amount of the flow seemed to have some relation to the amount of the hæmoptysis, as when the latter was copious the former was small in amount, and vice versa. There was no abnormal pain during the period of menstruation. She was married at 32 years of age and has been pregnant twice. The first, a boy, is alive and well. The second was a miscarriage. During the time she was pregnant the hæmoptysis ceased. The patient states that there was no lactation and that the breasts enlarged very little. About ten months after parturition the menstrual flow and the hæmoptysis re-appeared. At this time she was anæmic and the periods were irregular. Sometimes she would miss two or three periods, but at each there was definite hæmoptysis. During the last few years, just previous to menstruation, she has had severe headaches and something seems to 'stick in her throat' which she tries to cough up.

The family history is of no importance. The patient is the third of a family of nine and none of the sisters suffer from hæmoptysis.

On examination the patient was found to be emaciated and anæmic; the lungs normal; the breasts not enlarged although there was a dark
aureola around the nipples. The heart was normal. The stomach was enlarged and succussion easily obtained. The uterus was not palpable. The patient was in a menstrual period. She told me she had been coughing up blood since the morning and showed me a receptacle with about half a pint of bright-coloured blood in it which was not frothy. She was put on a mixture containing calcium chloride gr. 10 per dose, three hourly.

On the 28th I again saw the patient. The hæmoptysis was more profuse than it had been the previous day. As she was becoming uneasy I gave her a hypodermic injection containing ergotinine citrate gr. $\frac{1}{15}$ and morphine tartrate gr. $\frac{1}{6}$ at 11 a.m. The hæmoptysis stopped about half an hour after this and remained absent till the afternoon, when she took some hot tea, after which she spat up a little blood. The stools were normal in colour and consistency.

On the 29th the patient looked much better. There had been no hæmoptysis since the previous afternoon. The menstrual flow had stopped. She was out of bed and in her usual state of health two days after the cessation of hæmoptysis.

I regret that I was unable to watch this case for a long period, as I was sent for duty to another station on July 5. On my return I found that the patient had left the station. A short time ago I had a letter from her in which she stated that her menstrual flow was irregular, small in quantity, and had almost stopped. She also stated that of late there had been no hæmoptysis.

I think the interesting points in this case are:

1. The definite history of hæmoptysis occurring and continuing through each menstrual period.
2. The cessation of hæmoptysis during pregnancy.
3. The re-appearance of hæmoptysis after parturition at the same time as menstruation.
4. The history of feeling something "stuck in the throat."
5. The cessation of hæmoptysis when the menstrual flow was ceasing.

From the history and examination of this patient I concluded that this was a case of vicarious menstruation. I have looked up several authorities, but up to the present I have been able to find very little literature on the subject.

In conclusion I must thank Dr. Payne and Captain Walshe, R.A.M.C. (S.R.), for their many valuable suggestions concerning this case.