THE RADIUM CLIMACTERIC.

BY

P. CLENNELL FENWICK, C.M.G., M.D.,

F.R.C.S.ED.,

OFFICER IN CHARGE, RADIUM AND DEEP THERAPY DEPARTMENT,
CHRISTCHURCH HOSPITAL, NEW ZEALAND.

In the menorrhagia of middle life radium has proved of so much value that if malignancy and fibroid disease are carefully excluded, radium can be safely recommended.

In this department we have, during the last four and a half years, treated 89 patients suffering from severe uterine haemorrhage. The average age has been 47 years, and the average duration of severe haemorrhage has been two years. Each case has been carefully followed up every three months, and our reports to date show that 73 patients report quite free from symptoms, 2 have been lost sight of, one failed to receive any benefit from the treatment, and 13 have been treated too recently to report. The one failure proved, on operation, to have a large submucous fibroid, which was not detected at the routine examination prior to treatment.

All patients who were sent here for treatment were in a condition of chronic invalidism, often very anaemic, sometimes blanched, and all obviously in a poor state of health. The routine treatment has been one application of radium to the interior of the uterus lasting twenty-four hours: radium element, 50 mg. in platinum tube (wall thickness 1 mm.), enclosed in rubber tube (wall thickness 1 mm.); total dose 1,200 mg. hours. As the uterine applicator is only the diameter of a No. 6 Hegar's dilator, an anaesthetic is seldom required. In no case has any untoward symptom developed. In a few patients transient sickness or headache has occurred; these symptoms cease directly the radium is withdrawn.

In order to ascertain whether the climacteric induced by radium treatment differs in any way from the normal "change of life," I have recently issued a circular questionnaire to 44 patients who were treated up to 1928. The answers given by the patients are shown in the following tables.

Cessation of Haemorrhage.

Question 1: How soon after the treatment did the bleeding completely cease? elicited the following replies:

	Cases.
At once	20
After one week	1
After three weeks	1
After four weeks	15
After six weeks	1
After eight weeks	4
After six months	1
After seven months	1

With reference to the last two cases I made special inquiries.

The patient who was not symptom-free for six months stated that the bleeding ceased seven days after treatment. She then went a very long tiring railway journey and had a return of bleeding which lasted fourteen days. One month later she had a bleeding, slight in amount, which lasted twenty-four hours. She noticed a pale pink watery discharge, which did not cease till six months after treatment.

The patient who was not symptom-free for seven months was treated in March, 1926. She reported regularly that she was free from any bleeding until November, 1926. She then had a return of bleeding, not severe. I gave a second radium treatment, and she has had no sign of haemorrhage since. This was the only patient who had two treatments.

In a few instances patients have written to say that they have been alarmed because free bleeding occurred after the treatment. In no case has this haemorrhage been as severe as the bleeding present before treatment. In these menorrhagic cases it is impossible to determine when the true menstrual period is present, or due to occur, as the haemorrhage is so irregular and often so prolonged.

If we could choose the time for treatment I think our results would be even better. I warn every patient that one or more bleedings will occur after treatment, but that the haemorrhage will eventually cease entirely.

Frequency of Bleeding.

Question 2 was: How often did bleeding occur after treatment? The replies showed that—

	Cases.
No bleeding occurred after treatment in	20
One bleeding occurred in	17
Two bleedings occurred in	7

Pain.

An investigation as to the presence of pain before and after treatment gave the following information.

	Cases.
Patients who had no pain before treatment	24
Patients who had pain before treatment	20
Patients reporting absence of pain after treatment	15
Patients reporting pain still present but less	4
Patients reporting no improvement of pain	1

Disturbance of Micturition.

The number of patients who suffered from painful or frequent micturition, and their condition after treatment, was as follows:

	Cases.
Before treatment	4
Condition improved	3
Not improved	1

Climacteric Symptoms.

The usual climacteric symptoms of hot flushes, headaches, nervous symptoms, stiffness, or indefinite joint pains were investigated.

	Cases.
No complaints were reported in	14
Hot flushes were noted in	29
Headaches in	25
Stiffness or indefinite joint pains	13

(Rheumatism is so prevalent in New Zealand that the complaint of stiffness and vague joint pains is very common among middle-aged people of either sex.)

After very careful inquiry among women who are passing through the normal change of life I can find no evidence that the climacteric induced by radium treatment differs in any way, except in rapidity, from the normal period of disturbance experienced by middle-aged women.

Three younger patients, suffering from tuberculosis of the lungs, were sent for treatment on account of severe and intractable uterine haemorrhage. One patient reports that she does not suffer from severe bleeding any more, but has returned to normal monthly loss. One patient reports that the bleeding has ceased, but she has had two attacks of severe nose-bleeding. One patient reports that haemorrhage has ceased, but chronic leucorrhoea is present.

I have been asked several times to treat young women suffering from severe haemorrhage accompanied by much pain at the monthly periods. I am reluctant to treat young adults, but agreed to give treatment in two cases where the patients' health was being undermined by the severe haemorrhage, and neurasthenia was threatened by the patient's dread of the monthly ordeal. I gave one-third of the routine dose (50 mg. for eight hours), and both patients have reported that the monthly periods are normal and free from excessive pain.

A number of cases of menorrhagia in which a fibroid tumour was present have been sent for treatment. I have always urged these patients to submit to operation, but in six cases I agreed to give treatment because the patient was unable to undergo surgical treatment. In three cases the relief was remarkable, haemorrhage ceasing and other symptoms being relieved. In one case in which a fibroid tumour reaching to within one fingerbreadth of the umbilicus was present, and flooding was present at time of treatment, the haemorrhage ceased within a few days, and when I re-examined the patient six months later I could only detect a small movable uterus and was unable to find the large fibroid tumour I had noted six months before. My last two cases are too recent to report.

I think that with increased experience in the use of radium many cases of intractable uterine haemorrhage will not be allowed to wait until chronic invalidism occurs, but will receive prompt relief from this new ally of our profession.