Saul Horty Page 4-5

"The Nation's Reading Habit"
Magazine Section—Boston Advertiser

THE AMERICAN WEEKLY
Greatest Circulation in the World
Week of June 2, 1946

Painting by Willy Pogany—**Aucassin and Nicolette**—The World's Most Poetic Romance Retold by John Erskine

NICOLETTE, at the break in the dungeon wall, heard Aucassin praise her beauty and knew he loved her. She answered clearly: "Gentle knight, I flee to a far land, beyond your father's wrath. Never may you have joy of me, nor I of you."

She snipped off a golden curl and dropped it into his outstretched hand. He held it tight, and threatened to kill himself if she left him.

"Aucassin," said she, "do not exaggerate. I love you more than you love me."

"Now that is absurd," said he, "no woman can love as a man loves, for man's love is rooted in his heart."

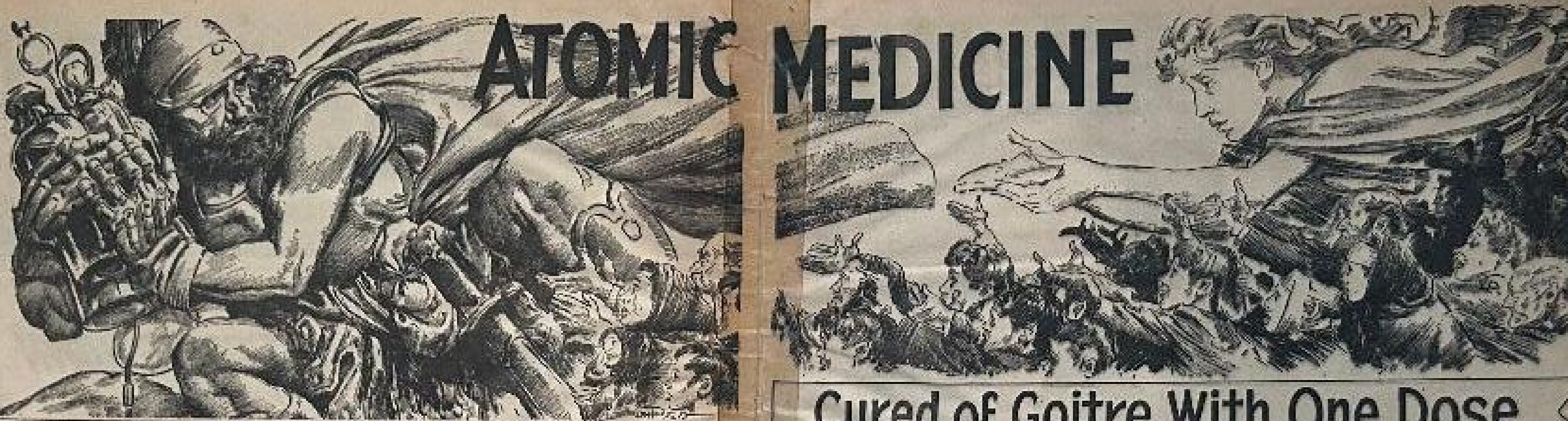
Before she could answer, the tramp of the guards came down the street, their swords ready to make an end of her as Count Garin had ordered.

But a friendly sentinel warned her just in time, whereupon she hid until the guards had passed.

Then taking farewell of Aucassin, she climbed the wall and made her way over the moat. The wild forest stretched before her and she had nowhere else to go.

(Next week Mr. Erskine continues the romance of the despairing lovers.)

ATOMIC MEDICINE



Foe of Cancer, Goitre and Leukemia

By Win Brooks

THESE terrible diseases which afflict mankind—cancer, toxic goitre and leukemia—may be wiped out eventually or brought under control, if medical [illegible] in the field of nuclear physics which produced the atomic bomb.

Radioactive iodine already is being successfully used in the treatment of toxic goitre (Graves disease). Permanent cures, without recourse to surgery, seem to be indicated.

Experimental treatment in cancer cases through the use of radioactive substances is promising. Experiments in leukemia cases to date have consisted merely of palliative treatment and while no cure can be reported advances are being made.

The atom-smashing cyclotron at Massachusetts Institute of Technology is being used to make radioactive medicine in which great physicians and great scientists place great hopes, but the process is long and extremely expensive and the supply of materials is extremely limited.

Radioactive iodine is produced in the cyclotron by smashing atoms of tellurium, a non-metallic element analogous to sulphur.

The radioactive iodine resulting from a full night's work of the cyclotron staff is an amount which will hardly fill a cocktail glass! Sometimes one radioactive iodine cocktail will cause a goitre and the symptoms of goitre to vanish.

But the point is this: if the government would release the highly radioactive uranium from its atomic bomb stockpiles, sufficient radioactive iodine could be produced, comparatively cheaply, to treat every case of toxic goitre in the country!

As recently as March, in a Boston address touching upon the use of radioactive iodine, Dr. Karl T. Compton, president of Massachusetts Institute of Technology, said:

"Probably the greatest uranium piles which have been designated in connection with the atomic bomb development and which give off enormous quantities of radiation may supply a new radiation tool for medical science."

It was another address by Dr. Compton ten years ago which launched the production of radioactive iodine for medical use in goitre treatment. Dr. Compton asked medical men and scientists to join in research. The possibility [illegible] with beta rays was discussed.

Dr. Saul Hertz, at that time only 30 years of age but already established as head of the thyroid clinic at Massachusetts General Hospital, and a research associate at Harvard and M.I.T., was among those present. Other great medical and scientific men who were immediately impressed included Dr. J. H. Means, Dr. Arthur Roberts, a nuclear physicist; Dr. Earl M. Chapman, another great thyroid specialist, and Dr. Robley Evans, Tech professor who later assumed charge of the M.I.T. cyclotron program.

Dr. Saul Hertz

Result of that meeting was construction of Tech's cyclotron and the first production of radioactive iodine for experimental use on rabbits. The thyroid gland, which causes goitre, was found to absorb within five minutes all the iodine it could hold. Many times as much iodine went to the thyroid gland as to any other part of the body.

This iodine, alive with radioactivity, went almost immediately to the seat of goitre and its beta rays began a bombardment of the diseased gland. The dose acted as a medicine gun on the goitre to disintegrate it.

Dr. Hertz and his associates negotiated with Tech for the production of radioactive iodine in the cyclotron. When Dr. Hertz entered the Navy as a commander in 1943, 29 patients had been treated with radioactive iodine at his Massachusetts General Hospital clinic. Most of these were women suffering from toxic goitre. Excellent results in the earliest cases were reported in 1942 and confirmation of the work of Drs. Hertz and Roberts came from California Institute of Technology, where radioactive iodine also was used.

When Dr. Hertz entered the Navy, Dr. Chapman was chosen to head the Massachusetts General Hospital thyroid clinic, follow the cases begun and continue the treatments. Twenty-two new cases received radioactive iodine under his direction.

Among goitre patients who got the radioactive "cocktail" were two young men, one of whom later served with the Army, winning five battle stars. The other served in the Navy. In another case, the physical progress of goitre vanished and nearly all symptoms of hyperthyroid condition disappeared one month after the patient, a young mother of two children, swallowed one small dose of radioactive iodine.

Medical science is slow to claim complete cure of goitre by radioactive medicine. All cases in which cure appears to have been effected remain under observation on the possibility that the growth may again begin as it sometimes does.

Radioactive iodine is virtually painless. The small "cocktail" has no ill effect on the patient. A larger dose sometimes causes a brief spell of nausea. Hospitalization of the patient is not necessary except for research.

As with the sulfa drugs and penicillin, and more recently with streptomycin, a tremendous public demand is expected to develop for radioactive iodine and, as research develops in the fields of cancer and leukemia, for other radioactive medicines. But unless the government decides to use uranium as a life-saver—instead of as a life-annihilator, medical science will be unable to respond.

Other advances in atomic medicine will be reported by The American Weekly. How radioactive iodine has saved the life of a victim of cancer of the thyroid will be described next week.

Cured of Goitre With One Dose

By Anna D. Dane

I WAS happy in love and motherhood and grateful to God and [illegible] for life and good health.

My home is 102 Walnut st., Watertown, Mass. I was married in 1932. My husband for many years has conducted a men's and women's retail furnishing business [illegible] in Newton and Boston. We have been blessed with three children, a son now 12, another [illegible]

Until 1941 I enjoyed excellent good health. I was always active at my housework and in my husband's business. My weight was about 135. My dress size was 16.

In 1941 I began to fail. In the months of 1941 and 1942 I lost 23 pounds. My dress size dropped from 16 to 14 and [illegible] to 12 and finally to a 10. This was a decline so gradual that while it alarmed me and my family we had no realization of its terrible portent.

Normally energetic but calm I [illegible] gradually into a state of extreme nervousness. While walking I never could seem to walk fast enough for the pace within and yet nobody could walk fast enough to keep up with me. On Sunday, preparing dinner, I [illegible] around the house like a [illegible] in response to an urgent [illegible] inside me. My daughter used to say:

"Mother, there's no need of rushing around today. Take it easy. Nobody's in a hurry. It's Sunday."

But I couldn't slow down. I couldn't relax. I felt an increasingly extreme fatigue, yet I had to go restlessly on the go. My pulse was fast, my heart hammered. Waiting for sleep to come at night the pounding of my heart was like a clock ticking in the room.

In the later months of my illness a slight swelling appeared at the base of my neck and my eyes took on a glassy, distended appearance.

A woman's mirror, which tells her many secrets, whispers [illegible] more alarming than those. They were the first outward manifestations of toxic goitre, though I did not then know it. I knew only that a strange [illegible] held me fast in an inescapable grip, that I continued to lose weight and that some fire within me seemed to consume me. I could never seem to get cool [illegible] even in winter. To achieve sleep, even needed [illegible] temperature hovered around zero, I [illegible] to the [illegible] open in my bedroom, much [illegible] from a chronic [illegible] condition aggravated by night air.

In an attempt to stop losing weight I began to eat huge meals, twice as much as I ordinarily ate. My breakfasts were tremendous and I drank eggnogs before going to bed. Consuming the extra food was an effort. The fire burning up my energy demanded more and more fuel. Yet my weight continued to drop.

For some months my husband's sister watched my failing health with an anxiety which became acute once she believed she recognized symptoms of an overactive thyroid gland. She and my husband urged me to consult a doctor without voicing their suspicion. Though the swelling in my throat had not yet begun, the [illegible] more [illegible] within me [illegible] months after I had begun to fail and my symptoms were not so extreme as to be obvious to him. He prescribed a tonic and for the next nine months I consumed bottles of tonic and hundreds of pounds of extra food.

Mrs. Anna D. Dane

Steadily my weight dropped. Month after month I continued to fail. And in my neck the swelling began.

My weight was 103 and I could wear a size 12 dress but I was no longer interested in dresses—and when a woman is no longer interested in dresses she is really sick! My husband and his sister for a long time had been pleading with me to consult a specialist or enter a hospital for a thorough checkup, and I finally agreed to go to Massachusetts General Hospital.

There, at the thyroid clinic, I first met Dr. Saul Hertz, director of the clinic and a research associate at Harvard Medical School and Massachusetts Institute of Technology. I was not aware at the time that he had pioneered in the use of radioactive iodine for treatment of goitre cases. In 1941 I knew nothing of radioactive iodine. Iodine to me was something you put on a cut if you nipped a finger slicing bread.

Under Dr. Hertz' direction I underwent my first test to determine my basal metabolic rate, the indicator of thyroid gland activity. He compared my excessively high rate, made other examinations and told me:

"You very definitely have a goitre."

I said nothing. I knew, or thought I knew, what that meant: major surgery or death.

Dr. Hertz said: "I might have told you that with reasonable certainty just observing you if you sat across from me in a street car." He then explained the obvious symptoms.

I am not a natural worrier but I was deeply concerned about the prospect of thyroid surgery. Would it be successful? I had heard of cases where it was not. I knew that one surgeon had cut 30,000 women's throats to remove goitres. Who would care for my family during a long period of hospitalization and convalescence?

It was I, not Dr. Hertz, who first mentioned an operation. . . .

He said: "I can't promise but we may be able to do something for you without surgery."

He then went on to explain simply about radioactive iodine. How he had cooperated with Massachusetts Institute of Technology for its [illegible] in the cyclotron. How he had used it in more than 20 cases as a [illegible] method of introducing beta ray irradiation into the thyroid itself without affecting other organs or tissues adjacent to the thyroid.

[illegible] trust and a few weeks later I entered Massachusetts General Hospital to "take my medicine."

It had been explained to me that hospitalization was not necessary due to my condition or to the medicine I was to take but only for the purposes of research in order that a constant check on my reactions could be kept.

For two days I went through certain tests and about noon of the third day Dr. Hertz himself brought my radioactive iodine which had just come from the M.I.T. cyclotron. It was in a small capped bottle, colorless. Dr. Hertz poured it into a glass, carefully rinsing vial and cap in order not to lose any of the precious medicine. The rinsing water and another small amount were added to the radioactive iodine and I drank it in a swallow. It had only a slight taste.

What's the next step?

That's all there is to it.

I EXPERIENCED no ill effects of any kind, no nausea or faintness. I remained in the hospital for about 10 days, up and about, eating well. I didn't lose any more weight but I still felt greatly fatigued. The daily tests showed my basal metabolic rate had begun to drop to normal.

Finally Dr. Hertz told me with a smile to go home and take things easy for two weeks and then see him again.

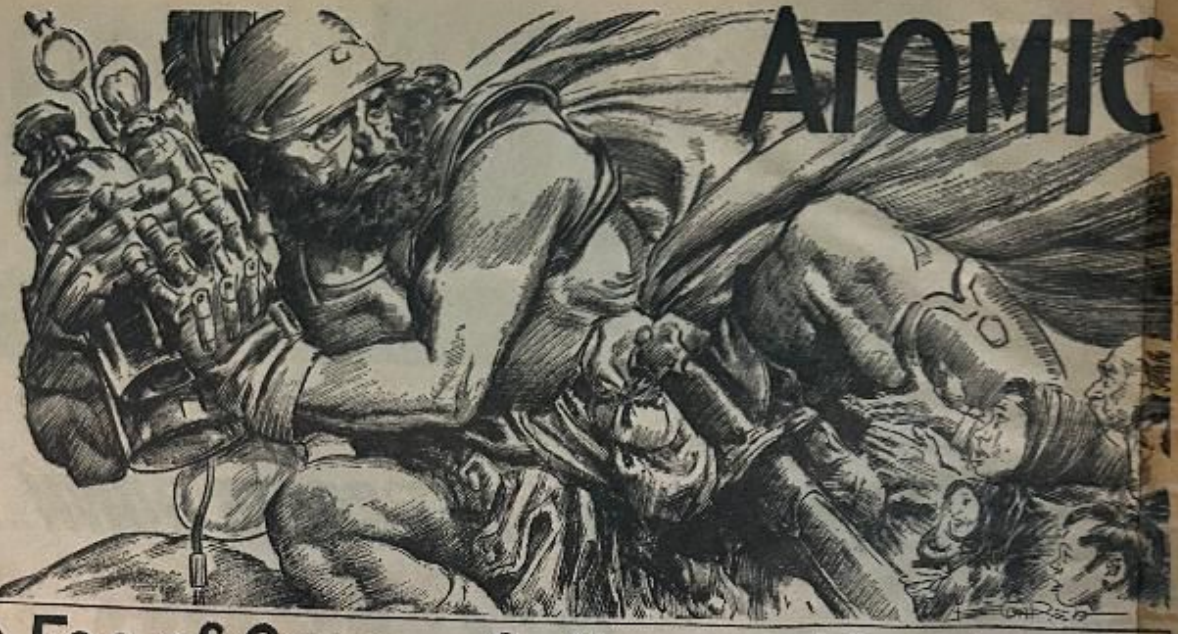
In two weeks I gained 10 pounds—the first time in 15 months I had been able to check my falling weight and put on an ounce. My basal metabolic rate had continued to drop. I felt much better. A great deal of my tension was gone, much of my nervousness. I was able to relax.

It is difficult to describe the peace and elation which came to me during the following months. My pulse ceased its racing, my heart its terrific hammering. Every visit to Dr. Hertz showed steady progress. The swelling left my throat and with it the feeling of constriction. The appearance of my eyes became normal.

My mirror told me daily a happier story. My weight increased so I no longer could wear the small size dresses which had been too large for me. I was better than a new woman; I was the woman I had been before my goitre began to grow.

I took only that single dose of radioactive iodine, yet when Dr. Hertz entered the Navy seven months after my treatment, all outward and inward symptoms of goitre had vanished.

That was three years ago. I remain in excellent health, at peace in mind and body, serene, thankful.



ATOMIC M

Foe of Cancer, Goitre and Leukemia

By Win Brooks

THREE terrible diseases which afflict mankind—cancer, toxic goitre and leukemia—may be wiped out eventually or brought under control if medical in the field of nuclear physics which produced the atomic bomb.

Radioactive iodine already is being successfully used in the treatment of toxic goitre (Graves disease). Permanent cures, without recourse to surgery, seem to be indicated.

Experimental treatment in cancer cases through the use of radioactive substances is promising. Experiments in leukemia cases to date have consisted merely of palliative treatment and while no cure can be reported advances are being made.

The atom-smashing cyclotron at Massachusetts Institute of Technology is being used to make radioactive medicine in which great physicians and great scientists place great hopes, but the process is long and extremely expensive and the supply of materials is extremely limited.

Radioactive iodine is produced in the cyclotron by smashing atoms of tellurium, a non-metallic element analogous to sulphur.

The radioactive iodine resulting from a full night's work of the cyclotron staff is an amount which will hardly fill a cocktail glass! Sometimes one radioactive iodine cocktail will cause a goitre and the symptoms of goitre to vanish.

But the point is this: if the government would release the highly radioactive uranium from its atomic bomb stockpiles, sufficient radioactive iodine could be produced, comparatively cheaply, to treat every case of toxic goitre in the country!

As recently as March, in a Boston address touching upon the use of radioactive iodine, Dr. Karl T. Compton, president of Massachusetts Institute of Technology, said:

"Probably the greatest uranium piles which have been designated in connection with the atomic bomb development and which give off enormous quantities of radiation may supply a new radiation tool for medical science."

It was another address by Dr. Compton ten years ago which launched the production of radioactive iodine for medical use in goitre treatment. Dr. Compton asked medical men and scientists to join in research tools. The possibilities with beta rays was discussed.

Dr. Saul Hertz, at that time only 30 years of age but already established as head of the thyroid clinic at Massachusetts General Hospital, and a research associate at Harvard and M.I.T., was among those present. Other great medical and scientific men who were immediately impressed included Dr. J. H. Means, Dr. Arthur Roberts, a nuclear physicist; Dr. Earl M. Chapman, another great thyroid specialist, and Dr. Robley Evans, Tech professor who later assumed charge of the M.I.T. cyclotron program.

Dr. Saul Hertz

Result of that meeting was construction of Tech's cyclotron and the first production of radioactive iodine for experimental use on rabbits. The thyroid gland, which causes goitre, was found to absorb within five minutes all the iodine it could hold. Many times as much iodine went to the thyroid gland as to any other part of the body.

Thus iodine, alive with radioactivity, went almost immediately to the seat of goitre and its beta rays began a bombardment of the diseased gland. The dose acted as a medicine gun on the goitre to disintegrate it.

Dr. Hertz and his associates negotiated with Tech for the production of radioactive iodine in the cyclotron. When Dr. Hertz entered the Navy as a commander in 1943, 29 patients had been treated with radioactive iodine at his Massachusetts General Hospital clinic. Most of these were women suffering from toxic goitre. Excellent results in the earliest cases were reported in 1942 and confirmation of the work of Drs. Hertz and Roberts came from California Institute of Technology, where radioactive iodine also was used.

When Dr. Hertz entered the Navy, Dr. Chapman was chosen to head the Massachusetts General Hospital thyroid clinic, follow the cases begun and extend the treatments. Twenty-two new cases received radioactive iodine under his direc-

Among goitre patients [illegible] dioactive "cocktail" were two young men, one of whom later served with the Army, winning five battle stars. The other served in the Navy. In another case, the physical presence of goitre vanished and nearly all symptoms of hyperthyroid condition disappeared one month after the patient, a young mother of two children, swallowed one small dose of radioactive iodine.

Medical science is slow to claim complete cure of goitre by radioactive medicine. All cases in which a cure appears to have been effected remain under observation on the possibility that the growth may again begin as it sometimes does.

Radioactive iodine is virtually tasteless. The small "cocktail" has no ill effect on the patient. A larger dose sometimes causes a brief spell of nausea. Hospitalization of the patient is not necessary except for research.

As with the sulfa drugs and penicillin, and more recently with streptomycin, a tremendous public demand is expected to develop for radioactive iodine and, as research develops in the fields of cancer and leukemia, for other radioactive medicines. But unless the government decides to use uranium as a life-saver—instead of as a life-annihilator, medical science will be unable to respond.

Other advances in atomic medicine will be reported by The American Weekly. How radioactive iodine has saved [illegible] of a victim of cancer of the thyroid gland will be described next week.

TOMIC MEDICINE

eukemia

Hertz *and Roberts came from* ...stitute of Technology, *where* ...*dine* also was used.
... Hertz entered the Navy, Dr. ... chosen to head the Massa... ...ral Hospital *thyroid* clinic, ...ses begun and *extend* the ... Twenty-two new cases re... ...ive iodine *under his direc*...
...cal" were two young men, ...ter served with the Army, ...tle stars. The other served ... the Navy. In another ...se, the physical presence ...goitre vanished and near... all symptoms of hyper... ...roid condition disap... ...red one month after the ...ent, *a young mother of* ... children, swallowed one ... *dose of* radioactive ...e.
...edical science is slow ...aim *complete* care of ...s by radioactive medi... All cases in which ... appears to have been ...ed remain under obser... *on the* possibility that ...wth may again begin ...ometimes does.
... *is virtually* harmless, ... has no ill *effect* on ...er *dose* sometimes ... nausea. Hospitali... ...s not necessary ex...
...rugs and penicillin, ...h streptomycin, a ...and is expected to ...iodine and as re... ...elds of cancer and ...active medicines. ...t decides to use ...-instead of as a ...ience will be un...
...omic medicine ...erican Weekly ... life ...saved ... gland ...thyr...

Cured of Goitre With One Dose

By Anna D. Dane

I AM 53, happy in love and marriage and motherhood, grateful to God and a miracle of medical science for life and good health.

My home is 100 Walnut st., Watertown, Mass. I was married in 1918. My husband for many years has conducted a men's and women's retail furnishing business at stores in Newton and Boston. We have been blessed with three children, a son now 27, another son [illegible]

Until 1941 I enjoyed normally good health. I was always active, in my household as well as in my husband's business. My weight was about 135. My dress size was 20.

In 1941 I began to fail. In 15 months of 1941 and 1942 I lost 32 pounds. My dress size dropped from a 20 to an 18 and a 16, and finally to a 14. This was a decline so gradual that while it alarmed me and my *family* we had no realization of *its* terrible portent.

Normally energetic but calm I went *gradually* into a state of extreme nervousness. *While* walking I never could *seem* to walk fast enough *for the* urge within me, yet *nobody* could walk fast enough to keep up with me. On Sundays, preparing dinner, I rushed around *the* house like a cyclone *in response to* an engine racing *inside me*. My daughter used to say:

"Mother, there's no need of rushing around today. Take it easy. *Nobody's* in a hurry. It's Sunday!"

But I couldn't slow down. I couldn't relax. I felt an *increasingly* extreme fatigue, yet I had to be everlastingly *on the go*. My pulse was fast, my heart hammered. *Waiting* for sleep to come at night the pounding of my heart was like a clock-tick racing *in* the room.

In the later months of *my* illness a slight swelling appeared at the base of my neck and my eyes took on a glazed, distended appearance.

A woman's mirror, which tells her many secrets, whispers none more alarming than those. They were the first outward manifestations of toxic goitre, though I did not then know it. I knew only that a strange tension held me fast in an unbreakable grip, that I continued to lose weight and that some fire within me seemed to consume me. I could never seem to get cool when, even in winter. To achieve sleep, even needed all temperature hovered around zero, I [illegible] windows open in my bedroom, much to the discomfort of my husband who is a sufferer from a chronic bronchial condition aggravated by night air.

In an attempt to stop losing weight I began to eat huge meals, twice as much as I ordinarily ate. My breakfasts were tremendous and I drank eggnogs before going to bed. Consuming the extra food was no *effort*. The fire burning up my energy demanded more and more fuel. Yet my weight continued to drop.

For some months my husband's sister watched my failing health with an anxiety which became acute once she believed she recognized symptoms of an overactive thyroid gland. She and my husband urged me to consult a doctor without voicing their suspicions. Though the swelling in my throat had not yet begun, the [illegible] made lung pulse was more pronounced [illegible] tightening within me [illegible]. Both tests were [illegible] only six months after I had begun to fail and my symptoms were not so extreme as to be obvious to him. He prescribed a tonic and for the next nine months I consumed bottles of tonic and hundreds of pounds of extra food.

Mrs. Anna D. Dane

Steadily my weight dropped. Month after month I continued to fail. And in my neck the swelling began.

My weight was 103 and I could wear a size 14 dress but I was no longer interested in dresses—and when a woman is no longer interested in dresses she is really sick! My husband and his sister for a long time had been pleading with me to consult a specialist or enter a hospital for a thorough check-up, and I finally agreed to go to Massachusetts General Hospital.

There, at the thyroid clinic, I first met Dr. Saul Hertz, director of the clinic and a research associate at Harvard Medical School and Massachusetts Institute of Technology. I was not aware at the time that he had pioneered in the use of radioactive iodine for treatment of goitre cases. In fact I knew nothing of radioactive iodine. Iodine to me was something you put on a cut if you nipped a finger slicing bread.

Under Dr. Hertz' direction I underwent my first test to determine my basal metabolic rate, the indicator of thyroid gland activity. He computed my excessively high rate, made other examinations and told me:

"You very definitely have a goitre."

I said nothing. I knew, or thought I knew, what that meant: major surgery or death.

Dr. Hertz said: "I might have told you that with reasonable certainty just observing you if you sat across from me in a street car." He then explained the obvious symptoms.

I am not a natural worrier but I was deeply concerned about the prospect of thyroid surgery. Would it be successful? I had heard of cases where it was not. I knew that one surgeon had cut 30,000 women's throats to remove goitre. Who would care for my family during a long period of hospitalization and convalescence?

It was I, not Dr. Hertz, who first mentioned an operation.

He said: "I can't promise but we may be able to do something for you without surgery."

He then went on to explain simply about radioactive iodine. How he had contracted with Massachusetts Institute of Technology for its manufacture in the cyclotron. How he had used it in more than 20 cases as a convenient method of introducing beta ray irradiation into the thyroid itself without affecting other organs or tissues adjacent to the thyroid.

Dr. Hertz was quietly confident and he won my trust and a few weeks later I entered Massachusetts General Hospital to "take my medicine."

It had been explained to me that hospitalization was not necessary due to my condition or to the medicine I was to take but only for the purposes of research in order that a constant check on my reactions could be kept.

For two days I went through certain tests and about noon of the third day Dr. Hertz himself brought my radioactive iodine which had just come from the M.I.T. cyclotron. It was in a small capped bottle, colorless. Dr. Hertz poured it into a glass, carefully rinsing vial and cap in order not to lose any of the precious medicine. The rinsing water and another small amount were added to the radioactive iodine and I drank it in a swallow. It had only a slight taste.

What's the next step?

That's all there is to it.

I EXPERIENCED no ill effects of any kind, no nausea or faintness. I remained in the hospital for about 10 days, up and about, eating well. I didn't lose any more weight but I still felt greatly fatigued. Yet daily tests showed my basal metabolic rate had begun to drop to normal.

Finally Dr. Hertz told me with a smile to go home and take things easy for two weeks and then see him again.

In two weeks I gained 10 pounds—the first time in 15 months I had been able to check my falling weight and put on an ounce. My basal metabolic rate had continued to drop. I felt much better. A great deal of my tension was gone, much of my nervousness. I was able to relax.

It is difficult to describe the peace and elation which came to me during the following months. My pulse ceased its racing, my heart its terrific hammering. Every visit to Dr. Hertz showed steady progress. The swelling left my throat and with it the feeling of constriction. The appearance of my eyes became normal.

My mirror told me daily a happier story. My weight increased so I no longer could wear the small size dresses which had been too large for me. I was better than a new woman; I was the woman I had been before my goitre began to grow.

I took only that single dose of radioactive iodine, yet when Dr. Hertz entered the Navy seven months after my treatment, all outward and inward symptoms of goitre had vanished.

That was three years ago. I remain in excellent health, at peace in mind and body, serene, thankful.