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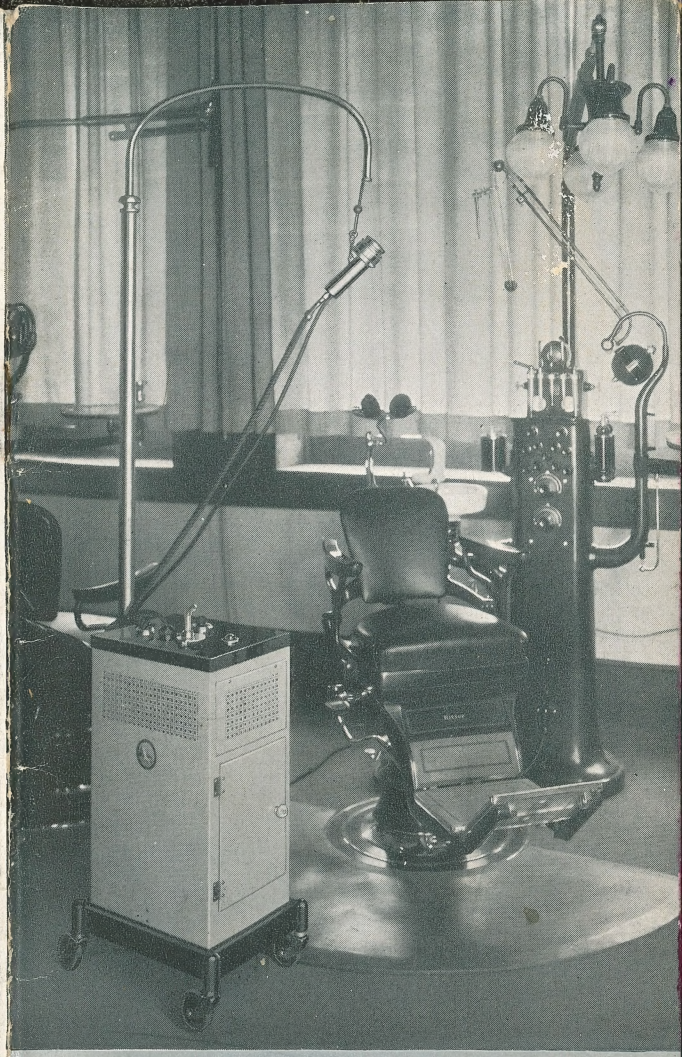

WHAT DENTISTS KNOW ABOUT ULTRAVIOLET THERAPY

?

REPORT

on a

QUESTIONNAIRE

addressed to a select group of the dental profession June 1, 1932,

by the

HANOVIA CHEMICAL & MFG. CO.

•

including

47 Case Reports

and other information

concerning

ULTRAVIOLET THERAPY
***in* DENTAL PRACTICE**

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FOREWORD

The day is rapidly approaching, if it has not already arrived, when every dentist must include ultraviolet therapy in his therapeutic armamentarium. Aside from the great number of conditions in which it has been found useful, it has an important bearing on the dentist's economic situation.

For example, take the matter of extractions, for which most dentists charge a set price per operation. To the public, pulling a tooth is simply pulling a tooth, no matter what complications that might involve. But should the dentist be confronted with an impaction and, after a painful operation, the patient be required to return to the office several times for treatment, an awkward situation arises. If the dentist does not charge extra for the additional work, he is very much out of pocket. If he attempts to pass the burden on to the patient, he is told, "I never had such trouble with any other tooth I have had pulled," and the patient suspects poor work has been done, besides being resentful because of the pain he imagines this poor work has caused.

When the dentist, on the other hand, follows his surgical work with ultraviolet irradiation, using the correct technique, in most cases postoperative pain is prevented and healing hastened. The patient's attitude then becomes favorably altered, he is satisfied that the dentist is using the most modern technique and will boast of it to his friends. Also, there will be fewer subsequent visits to be charged to "office expense." If the dentist is inclined to charge the

patient for these visits, he probably will find the patient more willing to pay.

Yet, despite the fact that this modality has been before the medical profession for the last twenty-seven years since this Company introduced it here in 1905, and has been widely adopted by the medical profession both in the United States and abroad for a surprisingly large list of pathological conditions, the dental profession still knows little of the subject or the possibilities of this form of treatment, and frequently manifests an astonishing apathy regarding it.

Among a body of scientifically trained men one looks to see a more rational procedure in the examination of a new idea, mode of treatment, or therapeutic apparatus. Here and there one arises from these ranks with outstanding evidence of a farther vision and profounder thoughtfulness. Such a doctor, an eminent D.D.S. practicing in Pennsylvania, whose name is withheld at his request, writes the following:

"I am a satisfied user of your large Kromayer Lamp, and use it routinely following surgery and in all cases of Vincent's Angina, and Gingivitis. While it is not a 'cure-all,' it is certainly a valuable therapeutic aid and has a definite place in the office of the modern dentist.

"Some time ago I had the pleasure of presenting a clinic on ultraviolet to our local dental society. In preparing for this clinic, I made a thorough study of the Kromayer, ——, and —— machines; and at the clinic, through the courtesy of the dealers, described the three lamps and their working parts, application, etc., using each lamp to demonstrate. The result was a bombardment of questions, which were answered to the satisfaction of most of the men present. *I was amazed at the general*

ignorance regarding the healing properties of ultraviolet." (The italics are ours.)

It was with the thought of gathering together at least some of the scattered practical experience with ultraviolet light in dental practice, for the benefit of the rest of the profession, that we sent, a few months ago, a questionnaire to a representative body of dentists in each state.

So far as space permits, the results of this effort have been assembled on the following pages. Ultraviolet therapy is not a panacea for all mouth conditions, nor does it warrant the abandonment of other forms of treatment. But it does have a definite place in your clinical work, and its results are definitely established and clinically proved.

It is worthy of note that most of the cases reported in the following pages were treated with earlier models of our lamps (where Hanovia equipment was used). During the past two years basic improvements have been made in all of our apparatus, but none more radical than in the Kromayer models. The two lamps illustrated on pages 17-18 are superb instruments of remarkable intensity and precision.

We invite, and at all times welcome, serious inquiries regarding ultraviolet therapy, and feel that we are in a unique position to answer authoritatively questions regarding a modality which we were the first to introduce in this country and in whose manufacture we have always been the acknowledged pioneers and leaders.

RESULTS OF QUESTIONNAIRE

Mailed About June 1, 1932

—

QUESTION 1

(a) *Have you used ultraviolet in your practice?*

128 answered YES

351 answered NO

(b) *For how long?* (c) *Still using it?*

Of	1	using	it	13	years	1	is	still	using it
"	3	"	"	10	"	3	are	"	" "
"	1	"	"	9	"	1	is	"	" "
"	4	"	"	8	"	4	are	"	" "
"	2	"	"	7	"	2	"	"	" "
"	3	"	"	6	"	2	"	"	" "
"	11	"	"	5	"	10	"	"	" "
"	1	"	"	5½	"	1	is	"	" "
"	8	"	"	4	"	8	are	"	" "
"	12	"	"	3	"	12	"	"	" "
"	5	"	"	2½	"	5	"	"	" "
"	24	"	"	2	"	22	"	"	" "
"	8	"	"	1½	"	8	"	"	" "
"	19	"	"	1	"	13	"	"	" "
"	1	"	"	9	months	1	is	"	" "
"	2	"	"	8	"	1	"	"	" "
"	7	"	"	6	"	3	are	"	" "
"	1	"	"	4	"	1	is	"	" "
"	3	"	"	3	"	1	"	"	" "
"	8	"	"	less than 3 months, 4 are still using it.					

One who said "a few months," two who said "several years," and one who did not state the period, all are still using it.

It is noticeable that those discontinuing were mostly short-time users; of the 21 so indicated above, only four had used ultraviolet more than a year. And 14 of the 21 had been using some one or other of the miscellaneous devices which have sprung up during the last few years.

Obviously, the 351 who answered question 1-a negatively are not represented in the following data, except under question 5.

QUESTION 2

For what conditions have you found it most effective?

Prevent or relieve post-operative pain	69
Vincent's Infection	39
Pyorrhea	37
Gingivitis	18
Infections	17
Abscesses	5
Dry Sockets	5
Infected Sockets	4
Periodontitis	3
Establishing blood clots	2
Neuralgia	2
Osteomyelitis	2
Periodontoclasia	2
Sensitiveness	2
Stomatitis	2
Cellulitis cases with free adequate drainage	1
Fistulas	1
Herpes Facialis (so-called fever blisters)	1
Neuritis	1
Stimulating bone regeneration at apices of teeth	1
To hasten repair of slowly healing fractures	1

Many who replied indicated their use of ultraviolet in more than one condition. A summation of the above figures naturally would not agree with the total number of users given under question 1-a.

It should be remembered that the above figures indicate the number of dentists who claim to have found ultraviolet light effective in the conditions named. It is the profession speaking—not the manufacturer of this apparatus or that — and speaking from its own experience.

QUESTION 3

What type of lamp do you use?

Hanovia Kromayer or Oral Therapy lamps	49
Other quartz mercury-arc lamps	35
Carbon-arc lamps	18
Cold ultraviolet lamps	15
Miscellaneous devices	11

To those who are thoroughly acquainted with the characteristics of all of these different makes, the reason for the predominance of Hanovia lamps is obvious. They have been before the profession longer, being indeed the first therapeutic ultraviolet apparatus on the market; their intensity is greater, quality has been demonstrated in long usage, and their therapeutic efficiency has been amply proved.

In connection with these figures, and with the note under the table of answers to Question 1, on page 6, the following extract from an article by John H. White, D.D.S., on "Ultraviolet Radia-

tions as an Aid in the Treatment of Oral Lesions, with Special Reference to the Treatment of Vincent's Stomatitis," which appeared in *The Dental Cosmos*, October, 1932, is especially pertinent:

"The qualitative distribution of radiation in the spectrum and the amount of energy (intensity) discharged in these various spectral regions is of utmost importance to the dentist. It is for this reason that an exposure of ten seconds from the manufacturer's "A" lamp may produce the same effect as an exposure of sixty seconds from the manufacturer's "B" lamp, while a continued exposure from the manufacturer's "C" lamp may not produce any reaction at all; yet all three lamps deliver ultraviolet in the general sense.

"In considering the various sources of ultraviolet radiation, the dentist should obviously select the lamp that produces ultraviolet light in that portion of the spectrum that produces desirable physiological effects as applied to the practice of dentistry, *and in sufficient quantity or intensity to minimize the treatment time to exposures of a few seconds.*" (The italics are ours.)

QUESTION 4

(a) *Are you familiar with the use of quartz applicators?*

Ninety-two were. Twenty were not. Six said "somewhat." And one who evidently had been listening to Amos 'n' Andy, facetiously replied "Yes and No."

Four did not give any answer; two knew only the one style they each were using; while one each stated, "I think I am," "Not very," and "Yes, to a certain extent."

(b) *What shapes have you found most useful?*

Straight only	8
Right angle only	6
Straight and right angle	10

One of these writes of "right angle curved," which throws doubt on the meaning of those who merely say "curved," many of whom may intend the right angle applicator.

Curved only	13
Straight and curved	8
Straight and 45 degree curved	4
Prism (no other description)	2

My own design	3
Several drew diagrams not accurate enough for classification	8
Miscellaneous	18
Various indefinite replies	11
Hanovia Applicators	5

- 2424 set
- 2422 and 2400
- 2440, 2409, 2424, and 2400
- Ashland and Folstein set

A complete assortment of the Hanovia quartz applicators available is listed and illustrated on pages 19-20.

QUESTION 5

(a) *Are you familiar with the Hanovia Oral Therapy Lamp and the more intense Super Self-contained Kromayer Lamp?*

Yes	28

As these two lamps have been introduced only during the last two years, there is no discrepancy between this figure and the number of Hanovia lamp users given under Question 3, on page 7, the others doubtless having our earlier models.

No	71
With Kromayer only	2
Somewhat, Slightly, Partially	10
Only from literature	2
Only by observation of other dentists' lamps	1

(b) *Do you desire more information about them?*

Yes	95
No	13

CASE REPORTS

ABSCESS

Female, age about 45 years, no children, referred by fellow practitioner.

Mouth Condition: Badly decalcified. Pus pockets together with root abscess.

Case referred back for opening of root canal, treatment, and packing of canal. After another X-ray and examination, treatment of root canal found to be satisfactory. Treatment: Heavy applications of ultraviolet on high-intensity switch for 3 minutes. This treatment three times monthly for three months, keeping close check with X-ray. At the end of this time abscess and surrounding rarefied bone tissue had shown new growth and tooth was as solid as rest of teeth, which also by that time had become very solid.

Results: Patient complains no more of tooth, feels better generally, but is still under observation in order that re-checks may be made with the X-rays.

L. W. Ayres, D.D.S.,
San Bernardino, Calif.

ABSCESS

Male, age 23 years, presented with swelling of lower right jaw in first premolar region.

Pain and swelling started previous day; could not sleep at night.

In the mouth: First premolar badly broken down, no exposure, no posterior teeth. Sore to touch. X-radiation diagnosis, pericementitis and periostitis.

Treatment: Opened pulp chamber, removed gangrenous pulp in a number of shreds with barbed broaches. Some, but no great discharge. Treated with phenol.

Applied ultraviolet light to region of first premolar root buccally fifteen minutes, lingually five minutes. Pain began to ease up in five minutes.

Patient comfortable from then until next morning. Used cathartics. Slept well.

Periostal abscess had pointed and was lanced after applying surface anesthetic.

Tooth extraction at subsequent sitting when serious symptoms had subsided.

Dr. Frederick A. Trevor,
Melrose Highlands, Mass.

ERUPTING THIRD MOLAR

Young woman, age 25 years. Erupting third molar had given trouble for past two years. Had temperature of 102° for three days. Tissue swollen some, quite painful. One application of ultraviolet ray produced relief in about one hour. No recurrence since, some six months ago.

Dr. T. J. Kimbrough,
Jackson, Tenn.

GINGIVITIS

Young man, age 22 years, presented with severe inflammation of gums of several months' standing. Treated his mouth with ultraviolet radiation, using quartz applicators, for about two weeks every other day, exposing about five minutes on each area, but with very little benefit. He did not come in again for about four months, by which time they were much worse. I then used the aluminum cone applicator which I received from you in the meantime, the first treatment exposing each area one minute, and the third treatment one and one-half minutes, by which time his mouth was normal. I gave these treatments every other day.

C. H. Yeager, D.D.S.,
Cleveland, Ohio.

Letter from Dr. Yeager:

I have had a number of similar cases, some of which responded with one treatment, others taking fifteen or more treatments.

Since using the aluminum cone applicator, I believe I get better and quicker results.

With my lamp, I find it takes too much time with the quartz applicators, even using the large prism, to go over the whole mouth, as I find I have to expose each area at least five minutes and then don't get any burn that is noticeable, and I don't get the results that I get with the aluminum cone applicator exposing one minute.

Using the large prism quartz applicator takes me 1½ hours at the very least, while with the cone applicator I can go over a full mouth in 20 minutes.

(Note: This simply emphasizes the necessity for choosing the applicator judiciously according to the technique required. The cone naturally passes more light than any quartz rod would, but not every orifice can be reached by the cone. Incidentally, our new Super Self-contained Kromayer Lamp has considerably greater intensity than the lamp used in this case.)

GINGIVITIS

As a test case I took a lady of about 35 years, having an area of inflammation of the gingiva of both lower cuspids. The inflamed part was of that bright red nature that is frequently seen, and is very difficult to correct.

I used the Kromayer Lamp with a large quartz applicator every other day. No medicine of any kind was used. In six or eight treatments the inflammation had entirely disappeared, and after a year's time has not returned.

DR. A. L. HARTER, *President-elect,*
Indiana State Dental Ass'n.,
Kokomo, Indiana.

GINGIVITIS

Miss B., age 30 years. Severe irritation of gums, bleeding and some pus, especially among lower anteriors. After scaling used lamp, 10 seconds at gum of each tooth. Continued treatment for a period of about three weeks.

Results: Gums tightened up nicely, bleeding stopped at end of second treatment, soreness disappeared at same time. Examined case six months later! no recurrence.

J. E. MAURER, D.D.S.,
Geneva, Ohio.

INFECTION

Female, age 48 years, presented with infected lower incisors on January 2, 1932. Incisors were removed. Healing took place immediately. Sublingual gland became infected and badly swollen and painful.

Treatment: Kromayer Lamp used.

1/ 5/32—1 minute local application on worst areas.
1/ 7/32—1½ minutes on some areas.
1/11/32—2 " " " "
1/15/32—3 " " " "
1/21/32—4 " " " "
1/28/32—swelling had nearly disappeared and soreness gone.
2/ 2/32—patient returned with gland completely normal.

I have at present another case similar to the above. Have given two treatments and have it under control.

DR. D. W. WRIGHT,
Adel, Iowa.

LOOSE TEETH

Lady about 42 years of age with fourteen teeth much loosened through absorption and general atonic state of surrounding tissues. After usual

operative procedure, a course of treatment with the ultraviolet rays was given, covering a period of three months, comprising three treatments a week, stepping up to a fifteen-minute period. Treatments were then discontinued for one month, after which six treatments were given covering a period of two weeks. A second period of rest for three months was allowed, at the end of which time there was a marked change in fixation of eleven teeth, the other three teeth not responding.

Six more treatments were given and at the expiration of the first year the teeth were normally fixed in the alveoli and have remained so up to the present, a period of three and one-half years. In my records I have several cases in which I have had similar experience and rarely fail if the peridental membrane is intact. X-rays have determined that the one marked influence of the actinic ray has been to reduce the thickening of the membrane in the periapical region, thereby permitting the tooth to resume its normal position and promoting renewed attachment and vascular activity.

J. WRIGHT BEACH, D.D.S.,
Buffalo, N. Y.

POST-OPERATIVE PAIN

Difficult lower third molar extraction requiring surgical intervention for removal. Gave ultraviolet irradiation with applicator inserted directly in socket for three minutes, after extraction. Patient experienced absolutely no post-operative pain and as she expressed it, "I could not extract any more teeth for her unless I used ultraviolet after the extraction."

Had three similar cases.

F. W. STRAIGHT, D.D.S.,
Markesan, Wisc.

POST-OPERATIVE PAIN

Mrs. A. presented with two badly infected upper incisors, acute pain, insisted on having them extracted. I hesitated due to swelling. I used ultraviolet rays for three minutes before extraction and same length of exposure after extraction. No post-operative pain and a remarkable recovery.

Mrs. A. made remark that her dentist extracted teeth and then burned the poison out of them.

(*Name withheld by request.*)

POST-OPERATIVE GROWTH

Patient called one week after upper teeth were removed, very much concerned with condition

of gums. I found anterior gums quite swollen and a growth of a dark purple tissue filling the groove where the six anterior teeth came out, resembling a bunch of grapes. This growth, however, did not seem to pain her much, and I suggested the ultraviolet ray treatment. I gave her a four-minute treatment. She said the gums felt better. She returned in three or four days, gums looking better. Gave another treatment of five minutes and case cleared up fine with no further attention.

(*Name withheld by request.*)

PUS DISCHARGE

Mrs. B. C., age 44 years, referred to me by her dentist.

Continuous slight discharge of pus from small sinus on top of gum in vicinity of extracted lower right first molar, which had been removed some eighteen months previously. Second molar and first bicuspid also missing. Radiographs revealed an apparent normal filling-in of tooth socket.

Previous treatment as reported to me: Gum had been opened and bone curetted, but discharge had persisted.

Treatment after case was put in my hands: Generous incision, gum laid back but the osseous structure appeared normal with good cortical layer of bone, with the exception of one spot about 1 cc. curetted and soft tissues replaced.

Discharge ceased for about four days, when it recurred.

Application of ultraviolet rays, using quartz rod, was made daily for one week. After second treatment discharge had lessened materially. At the end of the seventh day sinus practically closed.

The patient observed in six months and twelve months, with no return of the trouble, and has so remained to the best of my knowledge.

Dr. J. Franklin Moore,
Oral Surgeon,
Oakland, Calif.

PYORRHEA

Mrs. G., age 55 years, reported March 28, 1932, for treatment of pyorrhea.

Examined by X-ray for pockets and overhanging fillings. Also tested for malocclusion. Found a very advanced osteoclasia in the anterior portion of mandible and pockets around all other teeth. Lower anterior teeth very loose.

Gave patient very thorough scaling and adjusted slight malocclusion in bicuspid area. Patient told to report two days later. Prescribed calglucon tablets.

Next visit was devoted to curetting the pockets around six lower anterior teeth. This was followed by flushing pockets with sodium eosin by a Becton Dickinson syringe, and then exposing these teeth to the ultraviolet lamp for three minutes on the labial surface and the same length of time lingually.

This procedure was continued on four succeeding visits, until the entire mouth had been treated.

The next six visits (two a week) were devoted to a finer sub-gingival curettage of the entire mouth followed by 30-second buccal exposures and 40-second lingual and palatal exposures of the ultraviolet lamp.

All teeth except the lower anteriors had become tight and gums were normal.

At the twelfth visit the lower anteriors could be moved only by a strong pressure.

Patient dismissed May 24 with all teeth firm and gums in normal condition. Patient told to return in a month for general check-up.

A. E. Weinstein, D.D.S.,
New York City.

SENSITIVENESS

Mrs. J. R. presented herself for treatment the first of March, 1932. All lower front teeth were very sensitive, so sensitive you could not brush them. Put ultraviolet treatment on March 1, giving about two minutes to each tooth front and back.

Patient presented herself on March 8, very much relieved. Received another treatment of about the same duration, which cured the case.

Morton Van Loan, D.D.S.,
Albany, N. Y.

SENSITIVENESS

Mrs. W. had been complaining for some time about a hypersensitive upper right bicuspid which was not only very sensitive to touch but apparently was causing a neuralgic condition on that side.

No decay being apparent, and the gold inlay in that tooth evidently in good condition, I X-rayed the region but could find nothing abnormal. I decided that the condition was probably caused by a clasp surrounding that tooth when a small removable bridge was in place. I

had heard so much about this bothersome condition and tried so many things unsuccessfully that I almost gave up the idea of accomplishing anything in the way of improvement, except by removal of the tooth.

As a matter of experiment, I thought I would try ultraviolet. Using a quartz rod on the Kromayer Lamp, I exposed with slight pressure the gum and crown of the tooth for one minute each buccally and lingually, requesting the patient to report in a couple of days. As I expected, she reported a sore mouth, couldn't brush the tooth, the skin looked white, etc.

About three weeks later the patient reported that that side of the mouth was perfectly comfortable, no sensitiveness or neuralgia.

W. J. Riedel, D.D.S.,
Cleveland, Ohio.

SINUSITIS

Female, age 26 years, presented with infected maxillary sinus caused by devitalized and abscessed first molar. Tooth had been extracted resulting in quite a flow of pus through socket and nose.

Former operator had washed sinus for some three weeks, without any appreciable lessening of pus flow.

I gave ultraviolet treatments on six successive days, starting with one-half minute both through the nose and in socket, and increasing to two minutes each, in connection with irrigation. After the third treatment pus flow completely stopped. After the sixth treatment socket opening closed by flap.

Transillumination light showed sinus clear after six months, and so far as I know there has been no return of condition.

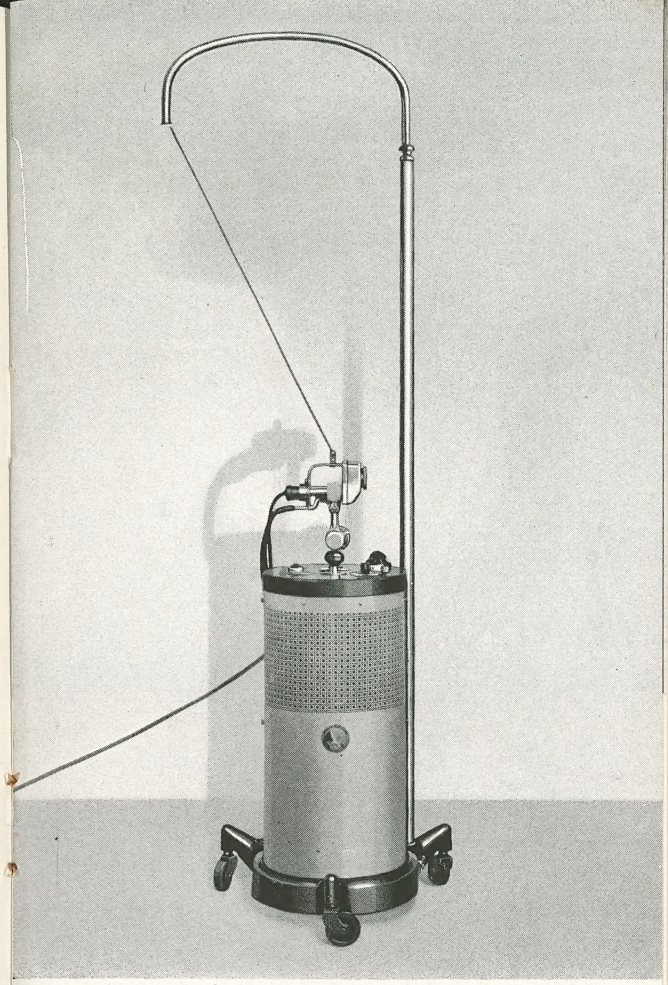
Elliott H. Rowland, D.D.S.,
Santa Ana, Calif.

STOMATITIS

A case of recent experience showed a state of general stomatitis, reflected mainly to the buccal tissues.

Treatment: Four applications of ultraviolet light each week, stepping up from one-half to one minute duration, with flood light through metal shield upon each focus of activity, followed by the quartz applicator directly upon central mucous patch. Prior to reference of the case, various well-known astringents, palliatives, and

Continued on page 21



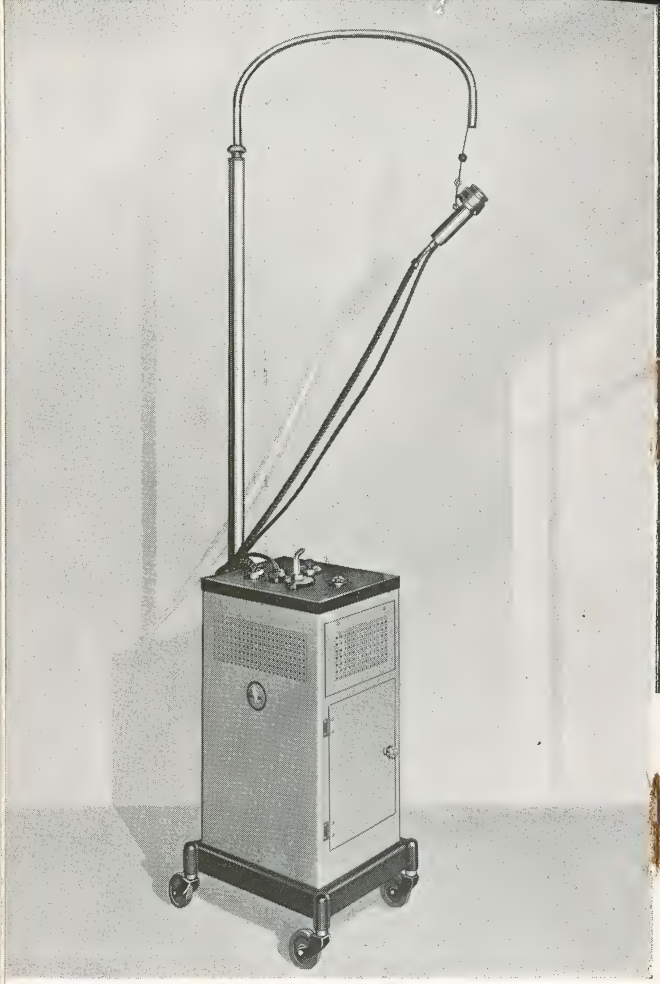
SUPER-SELF-CONTAINED KROMAYER LAMP

This is a complete and practical water-cooled quartz mercury-arc unit designed to supply a highly concentrated ultraviolet energy for localized therapeutic application. It is capable of an intensity three times that of the Kromayer Oral Therapy Unit shown on page 18.

It is provided with a main and a "super" circuit, the latter twice the intensity of the other, and is so precisely controlled that adjustment can be made from the lowest to the highest intensity for minute and accurate dosage.

The specially designed water-circulating system is notably efficient in keeping the burner cool for contact treatments. Pilot lights on the cabinets of both of these Kromayer Lamps show when the pump is in operation.

This lamp is designed for employment with the quartz applicators shown on pages 19-20.



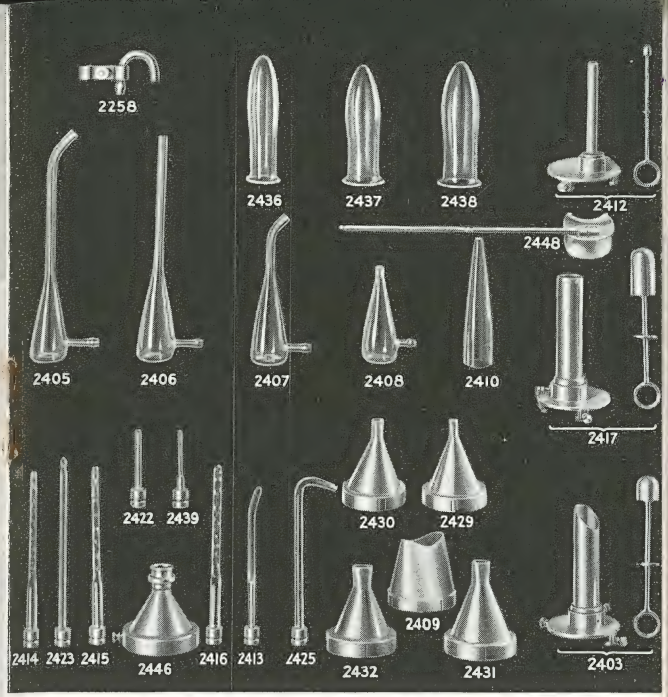
KROMAYER ORAL THERAPY LAMP

This is a self-contained, water-cooled, quartz mercury-arc unit of an entirely new design, produced especially for dental work, and providing one-third the intensity of the Super Self-contained Kromayer Lamp shown on page 17.

Though small and compact, it is complete in every detail. It is silent in operation. The water-circulating system is remarkably efficient in keeping the burner cool, and the motor is guaranteed.

The burner is extremely light in weight, is suspended from a gooseneck which swings freely in all directions, and is counter-balanced so that no weight rests on the operator's hands when in use. Of great importance is the fact that the burner may be held at any angle without affecting the intensity of the radiation.

All of the Kromayer applicators illustrated on pages 19-20 may be used with this lamp.



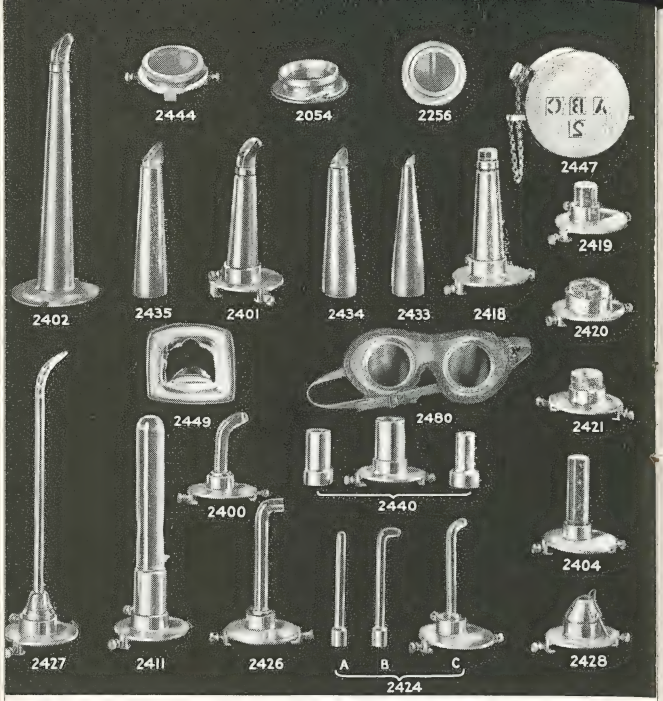
APPLICATORS

The Kromayer Lamps owe their extreme flexibility to the various Hanovia applicators which are available. The care and thought exercised in the designing and manufacture of these applicators are evidenced in their employment by some of the most eminent practitioners of quartz light therapy.

The illustrations herewith show the standard applicators in present use. They are made of pure quartz, fused quartz, and metal. In a few applicators, bubbles are placed in the quartz rods to diffuse the rays. Many of the forms shown here are intended for services other than dentistry, but are included here to show the range available.

Hanovia applicators readily fit all types of Kromayer Lamps.

2400 Ashland Universal Pyorrhea Applicator
2401 Baldwin Laryngoscope
2402 Baldwin Laryngoscope for Alpine Sun Lamp
2403 Burrow Prostatic Applicator
2404 Hemorrhoid Applicator
2405 Ladabeck Quartz Irrigator—large curved
2406 Ladabeck Quartz Irrigator—large straight
2407 Ladabeck Quartz Irrigator—small curved
2408 Ladabeck Quartz Irrigator—small straight
2409 Laurie Gingival Applicator
2410 Mayer Aural Applicator
2411 McCaskey Prostatic Applicator
2412 McManus Sinus Applicator
2413 Mehler Nasal Applicator
2414 Meyersburg Nasal Applicator ¼″
2415 Meyersburg Nasal Applicator $\frac{5}{16}$″
2416 Meyersburg Nasal Applicator ⅜″



APPLICATORS (*cont.*)

2417 Plank Proctoscope
2418 Plank Pharyngeal Applicator
2419 Quartz Lens—small round
2420 Quartz Lens—large square
2421 Quartz Lens—medium round
2422 Straight Quartz Rod 2¾″
2423 Straight Quartz Rod 6¾″ long, shaped end
2424 Sampson Pyorrhea Applicator—set of 3
2425 Sampson Hay Fever Applicator
2426 Sampson Laryngoscope
2427 Urethral Applicator
2428 Vernon Nasal Speculum
2429 Wagner Nasal Speculum ¼″ x $\frac{3}{16}$″
2430 Wagner Nasal Speculum ⅜″ x ¼″
2431 Wagner Nasal Speculum ½″ x $\frac{5}{16}$″
2432 Wagner Nasal Speculum ⅝″ x ⅜″
2433 Wagner Prismatic Reflector ¼″
2434 Wagner Prismatic Reflector ½″
2435 Wagner Prismatic Reflector ⅝″
2436 Wagner Quartz Speculum
2437 Wagner Quartz Speculum
2438 Wagner Quartz Speculum
2439 Weaver Applicator
2440 Sharpe Localizer with three tubes
2441 Woods' Filter
2442 Woods' Filter with holder
2444 Blue Window complete
2445 Blue Window without holder
2446 Holder for Quartz Rods
2447 Baby Stencil Complete
2448 Green Lip Retractor
2449 Hanovia Lip Retractor
2054 Applicator Adaptor for Alpine Sun Lamp
2256 Mica Protection Window

germicides had been employed for more than six months, while case showed increased inflammation and general advancement. One month's treatment with the ultraviolet rays has shown marked improvement and the tissues are resuming normal state. The period between treatments is being gradually lengthened and will be continued until case is cured, after which, courses of preventive treatment with the ultraviolet rays will be administered at subsequent intervals of one, two, and three months.

J. Wright Beach, D.D.S.,
Buffalo, N. Y.

SWELLING

Had a case with swelling between lower right first and second molars. X-ray showed no abscessed condition. Did not respond to medical treatment. Used infrared on the outside and ultraviolet on inside. Within two weeks swelling was gone and did not reappear. This was about two years ago.

Dr. E. P. Grady,
Kewanee, Wisc.

VINCENT'S INFECTION

This particular case was very bad when he came to my office on February 3, 1932. He had had the disease for about two years and could not get it cured.

I treated his gums with a solution of zinc chloride following with a 10% sol. of Iodine and a 15-minute treatment of ultraviolet light. Similar treatments were given on the 4th, 15th, and 23rd of the same month, and on the 26th I scaled and cleaned the teeth.

On March 1, I started on the filling and bridge work he required, completing this on March 21, when I ran another smear for Vincent's Infection, which proved negative.

A check-up on April 22 showed no signs of recurrence. On May 20, all the interproximal spaces had regenerated with new tissue, replacing that destroyed by the disease, and this had a natural color and filled out the spaces very well. The patient had gained about 15 pounds since the work was completed and is in much better health.

Wm. M. Tison, D.D.S.,
St. Louis, Mo.

VINCENT'S INFECTION

Miss E. M. Mc., school teacher, presented herself September 16, 1931, with very sore and in-

flamed gums. Dirty white slough and bad odor. Smear taken and examined with dark field disclosed fusiform bacilli and Spirochete of Vincent's. Diagnosis, acute Vincent's Infection.

Treatment: Spray bottle using 20 pounds pressure with Dioxogen. Removed all debris possible with cotton swabs. After isolating teeth with cotton rolls, using 5% sol. Salvarsan (base) with glucose, applying same with cotton pliers deep between each adjoining tooth. For home treatment, prescribed Dioxogen mouth wash and diet containing plenty of orange juice. Also proper elimination.

Sept. 17—Spray. Inflammation having subsided scaled the teeth for gross tartar. Ultraviolet ray 10 seconds in each interproximal space, 5 seconds at apex of each tooth.

Sept. 18—Spray. Further scaling.

Sept. 19—Spray. Ultraviolet ray 15 seconds in each interproximal space, 10 seconds at apex of each tooth.

Sept. 21—Spray. Slight reaction from ultraviolet. Smear showed negative Spirochete, few fusiform bacilli.

Sept. 24—Spray. Ultraviolet ray 20 seconds and 15 seconds.

Sept. 29—Spray. Examination by dark field showed negative. Dismissed case.

May 2, 1932—Prophylaxis. Mouth and gums in good condition. Dark field showed negative.

(*Name withheld by request.*)

VINCENT'S INFECTION

Miss L. C., aged 19 years, apparently healthy and well developed, was referred for treatment of chronic gingivitis. Smears were taken and sent to the laboratory. Report, Vincent's Infection. The ultraviolet ray was used, three minutes in each area of the mouth. The patient was instructed in the use of a sodium perborate mouth wash. Returned the following day and again ultraviolet ray treatment was administered, two minutes in each area. Reported back the second day after the second treatment and again ultraviolet rays were used, this time for three minutes in each area. The patient again reported back the second day after this treatment and smears were taken and reported negative. The patient was instructed to continue the sodium perborate mouth wash for five days and again reported back. Smears were taken and again the report was negative. Case dismissed after another week's observation.

The use of ultraviolet ray is a routine procedure in my practice following extraction. There has only been one case where the patient complained of after-pain. I have had no dry sockets to contend with either. I believe light therapy will win itself a very enviable place in dentistry.

(*Name withheld by request.*)

VINCENT'S INFECTION

Female, age 8 years, severe case of Vincent's Angina, presented April 26, 1932. Dried the area around three or four teeth at one time. Painted with sol. of sodium eosin 1:500. Used Kromayer Lamp 10 to 15 seconds on each area, buccally and lingually. Advised sodium perborate as a mouth wash. Repeated treatment three days later. Case dismissed May 2, 1932.

Dr. Alexander S. Scherer,
Brooklyn, N. Y.

VINCENT'S INFECTION

Gum ulcerated and sloughed out of interdental spaces as well as other portions of free margin. There were large ulcers on other surfaces of gum tissue. Seven ultraviolet treatments combined with other topical treatments and prophylaxis resulted in perfect cure.

Dr. Warren Martin Clawson,
Cincinnati, Ohio.

VINCENT'S INFECTION

This case had been treated by another man for six weeks. Lesion still persisted, and I was able to better the condition no further.

Case presented for light treatment and in two weeks' time, starting with a 30-second exposure and increasing to 1 minute, was cured. Treatment carried another week, when smear showed negative.

Dr. Eric H. Anderson,
Oakland, Calif.

VINCENT'S INFECTION

Female, age 11½ years.

Patient had been ailing for 5 weeks, in bed 3 weeks, running intermittent temperature daily. X-rays negative for T. B. Blood culture negative. Red count normal 70 hemoglobin, white low, but differential about normal.

3/23/32—Called by M.D. for check of mouth. Painful, gums swollen and sore, breath fetid, some patches at gingival. Smears loaded with Vincent's Spirochete and fusiform baccili.

3/24/32—Cleaned mouth with dilute H.O., painted gums with eosin sol. Irradiated with ultraviolet light. Prescribed sodium perborate mouth wash every 3 hours.

3/25/32—Treatment same.

3/26/32—Treatment same. Mouth showed marked erythema with more soreness, but no patches and breath O.K.

3/27/32—No ultraviolet treatment. Prescribed S. T. 37 as mouth wash, 1 pt. to 5 warm water every 3 hours.

3/28/32—Same.

3/29/32—Same. Mouth normal, all swelling and soreness had left, and gums looked to be in good shape.

Two weeks later, strip was recovered from blood on 4 days' culture. Blood transfusion daily. Patient died in the 11th week, but at no time did the mouth condition return to abnormal. Hemoglobin dropped to 50.

DAYTON D. DAVENPORT, D.D.S.,
Stockton, Calif.

VINCENT'S INFECTION

Female, age 19 years, presenting a Vincent's Infection, a superior right central with a putrescent pulp, and considerable swelling of the lip. The tooth was opened palataly, pulp removed and a dressing inserted, one and a half minutes' application of ultraviolet given, using the quartz applicator.

The following day the dressing was changed, canal thoroughly cleansed, and a minute and a half ultraviolet radiation given on both inferior and superior mucosa.

These treatments were continued three times a week, with an increase of exposure for several weeks, the last treatment being five minutes.

Ten months have elapsed since the last treatment and apparently no further disturbance or cause for same. Laboratory test showed the Vincent's Infection negative. The tooth appears to be in a healthy condition.

ROBERT H. LIEBERTHAL, M.D., D.D.S.,
Bridgeport, Conn.

VINCENT'S INFECTION and PYORRHEA

Patient admitted to sanitorium for treatment of pulmonary tuberculosis.

Upon routine examination of mouth, this patient was found to have a Vincent's Infection

associated with an acute suppurative pyorrhea of the upper and lower anterior teeth. The teeth in question were loose and could be moved very freely in the alveolus.

In addition to medicinal treatment, the patient was given two minutes' exposure of ultraviolet by the use of the Kromayer Lamp.

The lamp treatment was given every other day for a period of four weeks, at which time the patient's mouth was in a very normal state, all the mentioned symptoms having been removed.

Total time exposure at each sitting averaged six minutes.

ARTHUR A. GREENE, D.D.S.,
Canton, Ohio.

VINCENT'S INFECTION and PYORRHEA

Female, age 35 years, married, applied for treatment 3/29/32.

Diagnosis: Trench Mouth and advanced pyorrhea. Gave history of having been treated for pyorrhea two years previously. Been under treatment for Trench Mouth about six weeks, with unsatisfactory results. Complained of soreness of teeth and gums. No energy and very much depressed. Hardly able to keep up.

Treatment: Alkalinising diet, oranges, milk, fruit, and vegetables. Used mouth washes of Dioxogen, Fowler's Solution of Arsenic, and some Trichloracetic Acid at chair. Used ultraviolet treatment on gums every two or three days and as adjunct treatment did necessary scaling. Also did some gum surgery. Had Trench Mouth under control in two weeks. Had patient use Syrup of Alfamine and alfalfa tea for vitamins.

Dismissed case cured of all mouth infection May 16, 1932. Patient feeling fine in every way and better than for several years.

(*Name withheld by request.*)

Quite independently of the questionnaire, we have been favored with an excellent case report on Vincent's Infection by Lloyd E. Flagg, D.M.D., of Buffalo, N. Y., and a group of thirteen reports on various conditions by Wm. L. Finlay, D.D.S., Dept. of Physio-Therapy, Toronto Western Hospital, Toronto, Canada.

To both of these contributors we wish to express our deep appreciation.

Dr. Flagg's case was treated with one of our Oral Therapy units; Dr. Finlay uses a Kromayer Lamp.

These reports are included here because of the contribution they make to the general subject of ultraviolet therapy in dental practice.

VINCENT'S INFECTION

One of the worst cases of Vincent's Disease that I have ever encountered in private practice presented at my office on April 18, 1932. I feel that the splendid results obtained were in a great part due to the use of the quartz lamp.

The patient, female, age 21 years, had been in bed for four weeks under the care of her physician. The Vincent's had started in the throat and worked forward into the mouth. She had been treated with Gentian Violet, which obscured everything at her first visit. This had relieved pain, but had not given any real help toward healing.

At the first visit I could hardly get into the mouth, I found the Vincent's extending over the lower lip and on to the cheeks, and patient could hardly open her mouth. A heavy irradiation of ultraviolet was given without any applicator, at about four inches distance. Discontinuance of the dye was advised and patient given prescription for a mouth wash of a 1/2000th solution of bichloride of mercury in hydrogen peroxide, to be used every three hours.

At the second visit she could easily open her mouth. A spray of equal parts of warm water and peroxide was used about the teeth and gums. At this visit I could easily examine the mouth. There was marked proliferation of tissue and numerous ulcers. Chromic Acid 8% was applied, followed by bicarbonate of soda. The field was then washed with warm water and the sore areas were irradiated with ultraviolet, using suitable applicators and exposures of from two to three and one-half minutes.

The next visit showed a marked improvement, areas of the lesion disappearing, proliferation markedly diminishing. At this visit I used suitable applicators and treated about the necks of the teeth with ultraviolet.

Very shortly afterward the case was well enough to give a thorough prophylaxis and scaling, though I continued with ultraviolet irradiations three times a week.

On May 5 the case presented and microscopic examination failed to demonstrate bacilli, the smears being negative. The tissue had returned to normal and the patient's morale was restored. The case was dismissed for three months, at which time a check-up and prophylaxis will be given.

LLOYD E. FLAGG, D.M.D.,
Buffalo, N. Y.

The Following are all by Dr. Finlay:

OSTITIS OF THE MANDIBLE

CASE NO. 1:

Patient presented himself at hospital clinic with an ostitis of the mandible. X-rays showed a breaking down of the bony tissue just distal to the third molar area, measuring fourteen by eight millimeters.

One year previous a difficult extraction had been carried out (surgical) and after healing had taken place patient had been wearing upper and lower dentures. He had found it difficult to wear the lower because of pain in the region of the rarefaction. Medical examination showed a plus four Wasserman reaction. A hard swelling showed over the region extending from the angle forward about 1¼ inches, and buccally and lingually to a depth of ¼ inch from ridge.

A mandibular anesthetic was given, using a 2% Novocain solution and an incision was made along the ridge; flaps laid buccally and lingually to expose affected area of bone. Using a tonsil applicator consisting of a 4-inch metal tube with a quartz tip, contact was made with the bone for a period of 2 minutes, while an assistant kept the area free from blood and saliva. Using the same applicator, an exposure was made on the lingual of the ridge for 30 seconds and similarly upon the buccal for 30 seconds. This was followed by an exposure for 2 minutes at half an inch. The wound was then sutured and patient dismissed for two days. Upon patient's return, the suture was removed and the same exposures

as above were carried out once more, but because of soreness the time was reduced; 1 minute being the total time of exposure in contact and 2 minutes at ½ inch. The wound looked well and patient was ordered to return in two days, when he reported that he still had pain, but it was tolerable.

The same exposure was given and patient reported back two days later, the exposure on this occasion being increased to 3 minutes' contact over the ridge and 2 minutes buccally and lingually at ½ inch distance. Pain on this occasion was much less, except on pressure.

Another treatment was given at the next visit and patient reported pain negligible. Two days later same dosage was repeated, but there was still pain when heavy dehematizing pressure was used. This, of course, was reasonable when the extent of the wound was considered, and also the fact that third-degree erythema was induced at first treatment.

The same treatment was carried out after two more days, and patient was dismissed for 17 days, when he reported for further X-rays.

Summary: A condition of Syphilitic Ostitis extending over an area 1¼ inches long by ½ inch wide and estimated through X-rays to be 8 mm. deep. These measurements were estimated after flaps were laid back.

It was thought inadvisable in this case to curette because of the systemic condition, and quartz-light treatment was resorted to, using a Kromayer water-cooled equipment and a quartz-tipped tonsil applicator.

Seven treatments were given and X-rays were taken prior to and 17 days after treatment. Pain which was present when patient presented himself, and which prevented the wearing of a lower denture, was absent when treatment was completed. Patient reported 144 days later and X-rays were taken of the affected region. One year later patient was asked to report and X-rays were again taken.

CASE NO. 2

DRY SOCKET

Female patient presented for extraction of right lower second molar, for which a mandibular anesthetic was given. The mouth was badly infected, serumal calculus and debris being very much in evidence. One week after extraction patient reported to clinic with dry socket and great pain. A quartz nasal applicator was

inserted into socket with slight pressure and exposure made for 2½ minutes. Two days later patient reported that pain had decreased considerably about three hours after treatment and had not recurred. Further exposure was made at this time; 3 minutes. Blood was in evidence at this time.

Patient was slight, under-nourished type, underweight and with poor appetite.

One month later four lower anteriors were removed and considerable pain was experienced. Patient reported to light clinic a week later, the delay being due to operator doing Kromayer work being present only on certain days. Nasal applicator was used with pressure in each socket for 3 minutes. Another exposure was made buccally at 2 minutes, using a mask to protect all but contiguous tissue. The result was that patient reported back eight days later that normal healing had taken place and pain had ceased as on previous occasion.

CASE NO. 3

POST-OPERATIVE PAIN

Male patient presented for removal of left lower third molar (impacted). There was considerable swelling present two days after extraction and pain was quite severe. The mouth could be opened about one inch.

An application was made to the mouth of the socket for 1½ minutes with heavy 45-degree curved quartz applicator. Saline mouth wash was advised. Patient reported one week later stating that pain was present only when mouth was opened. Swelling had subsided about ten hours after first treatment and a large clot had broken away.

Another exposure was now made, using a fine quartz point in the socket for 3 minutes, and an exposure to the mouth of the socket for 3 minutes. Infrared exposure was made externally on the angle of the lower jaw for a period of 15 minutes. Patient was instructed to report back if treatment was necessary. This visit concluded the case.

CASE NO. 4

DRY SOCKET

Patient presented for extraction of lower left cuspid. A dry socket developed and process was exposed with great pain since extraction four days previous. In view of our experience with quartz-light treatment in cases of this kind, it

was thought possible to proceed further with the routine extractions, and four more teeth were removed, process trimmed and sutures used.

Patient was referred to Light Clinic, where fine point quartz applicator was used for 3 minutes in the socket of the lower left cuspid, and exposure was also made on the upper buccally over the area of the most recent extraction, for a period of 2 minutes with contact quartz, in the latter case using a short, thick applicator curved 45 degrees.

Patient had no further trouble.

Case No. 5

POST EXTRACTION

Staff physician of a robust type presented himself at the clinic with devitalized left upper third molar and history of muscular rheumatism. Mouth condition generally was good. X-rays accompanied this case.

This tooth had to be removed buccally and considerable bone was cut away and a great deal of trauma induced. Patient was taken to Light Clinic immediately following extraction and an exposure was made in the socket with short quartz applicator for 2 minutes. Patient experienced intense pain for two hours and a half and subsequent to this pain disappeared completely. No swelling or discomfort followed, but as a precautionary measure a similar exposure was made the next day for a period of 3 minutes.

Case No. 6

PRE-OPERATIVE and POST-OPERATIVE

Patient, epileptic, presented for extraction of unerupted lower left third molar, which was accompanied by an acute inflammatory condition. Mandibular anesthesia was induced, using three cc. of 1% Novocain solution. Prior to injection patient was referred to Light Clinic, where three exposures were made in the third molar area, with a short quartz rod over buccal, occlusal, and lingual for a period of 2 minutes, using pressure. Subsequent to extraction another application was made to the socket, with the same applicator, for a period of 2 minutes.

Patient reported no pain, no trismus, no complications.

Cases No. 7-8

POST-OPERATIVE

Staff dentist had a right upper third molar removed, followed by an application of ultraviolet

in the socket with a short quartz applicator for 1½ minutes. Healing proceeded normally and no pain was experienced.

Staff nurse presented with severe pain following extraction of lower left molar six weeks previous. The socket had closed and application was made with a short, thick quartz applicator over the socket and with light pressure for a period of 3½ minutes. Patient reported that pain disappeared the following day and had not recurred.

Case No. 9

POST-OPERATIVE PAIN

Case presented at Light Clinic with lower anterior sockets open and painful from extractions sixteen days previous. Four-minute exposure was made over this area buccally at 2-inch distance, using a tube ¾" diameter. From ten on the sockets healed up and pain disappeared as with a normal case.

Case No. 10

POST-OPERATIVE PAIN

Hospital Secretary reported at Dental Clinic with three right lower molar roots buried and exostosed. These were removed and considerable pain developed. Three days later patient was given an exposure of three minutes at two-inch distance with a one-inch tube over the surface of wound.

Patient reported two days later with pain just as intense as before. Exposure in the mouth was repeated for five minutes and externally an exposure of infrared was given for 15 minutes at 15 inches. Two days later patient reported pain still as evident as before. Quartz exposure was given for 5 minutes at 2-inch distance, followed by infrared externally at 12 inches for 15 minutes. Five days later patient reported that pain was alleviated 24 hours after last treatment, and on this day a spicule of bone was removed from wound. Healing proceeded without incident.

Case No. 11

PERIODONTITIS SIMPLEX

A number of cases of Periodontitis Simplex were treated with good results.

The first which presented was a woman of middle age, slightly built, over-worked, undernourished, suffering from continual headaches, and pain due to the mouth condition. The mouth showed considerable quantity of serumal calculus

with the soft contiguous tissue beefsteak red. Prior to treatment with U.V.R. the patient used a solution of sodium perborate for one week, three times a day. Scaling was done on the lower teeth. Light treatment was commenced immediately after this scaling.

The first exposures were for 2 minutes at 2 inches with a tube, to the right and left lowers and anterior region. Patient complained of headaches after first treatment and the mouth was sore from the exposure. Second treatment a week later consisted of four exposures at 2 inches distance for 3 minutes. All exposures were carried out on the buccal.

One week later the same dosage was repeated and patient reported a slight tenderness from the dosage of the previous week. Patient did not report for two weeks and when questioned regarding her absence stated that the surface tissue had peeled off and pain had been quite severe. Mouth looked very much improved at this time and extraction of certain teeth was advised. Directions as to proper brushing were also given. Ultraviolet treatment was withheld on this occasion.

The following week the upper tissues were exposed buccally, right, left, and anterior, for 3 minutes. Two days later this was repeated for 4 minutes and no appreciable reaction was observed from the first exposure on the upper. Five days later patient reported with a history of a good reaction on the upper from the last exposure. The right lower buccal was given an exposure of 4 minutes at 2 inches. Four days later the patient reported again and the mouth looked well, but some calculus still remained. She was referred for further scaling.

Three weeks later further treatment was given on the lingual of the lower anteriors for 3½ minutes with thick quartz rods, 45 degree angle. Condition cleared up satisfactorily.

This and all other cases were checked by the senior dentist in charge of the Hospital Clinic.

CASE NO. 12

SORDES AND CALCULUS

Patient with a plus-three Wasserman, 39 years of age, male, lean and healthy type, suffering from a sciatic condition, presented with a mouth in a neglected condition, showing sordes and calculus in all subgingival spaces.

Ordinarily when a patient of this type is referred to a dental clinic the examiner does not

hesitate to condemn any doubtful teeth, bearing in mind that the probability of the patient maintaining a strict mouth toilet in the future is very slight.

However, this patient's oral state, because of his systematic condition, demanded that we adopt some other procedure. He was referred to the Light Clinic in the hope that his periodontal condition would clear up with ultraviolet treatment.

Ten treatments were given, covering a period of five weeks and ranging from 3 minutes at 2 inches to 5 minutes at 2 inches with the intensifier. Scaling was done after the third treatment and the mouth cleared up very well.

CASE NO. 13

UNERUPTED SECOND BICUSPID

Young married woman, 27 years of age, robust, short, healthy, presented with history of right facial neuralgia and intermittent pain in the right frontal. There was no evidence of any systematic condition and the case was referred to the Dental Clinic and X-rays taken.

These showed an unerupted second bicuspid on the left. Bridge extended from the left upper first bicuspid to the left upper second molar. It was decided to remove the unerupted tooth. An infiltration injection was made with 1½% Novocain and a flap laid back with the mesial margin on the distal of the first bicuspid. The bone was removed on the buccal from above the ridge as far as the X-rays showed the offending tooth to be lying.

The X-rays were of doubtful value, both giving an incorrect idea of the relationship of the tooth to the first bicuspid and to the Antrum. When a sufficiently large opening had been made, it was found that the tooth was lying at an angle of about 45 degrees to the ridge, with the bucco-occlusal cusp engaged on the lingual side of the first bicuspid root and about $\frac{3}{16}$ inch of the root end in the Antrum. Using a fissure bur, the tooth was cut midway between the root end and the occlusal surface, and the upper half tipped out first and lower half easily removed afterward.

Considerable bone had to be removed as the tooth was lying nearer the lingual than the buccal and it was expected the amount of trauma caused by the operation would give the patient a very uncomfortable time. The patient was

immediately given an ultraviolet exposure of 4 minutes at 2 inches, with a tube, over the sutured wound surface.

Patient reported two days later for further exposure and she stated that pain had been severe the previous day and still was very uncomfortable. The dosage on this occasion was the same as before.

Ten days later the patient reported for examination, stating that she had got along very well and had no pain since the last exposure. On this occasion, we decided to give another treatment to hasten healing, and an exposure was given similar to the previous ones. It is now a month since patient's last visit and she has not reported back.

Case No. 12 is typical of a number of Periodontitis Simplex cases which cleared up very well under treatment by the Kromayer Ultraviolet Lamp.

In all these cases it was found necessary following Sampson's ideas, to give a very severe dosage to start with, obtaining from a third to a fourth-degree erythema.

A number of cases of apical abscess were referred for light treatment; the percentage of success in these cases was very low, although the patients on the whole were a good type and referred from private offices. It is probable that the technique could be changed to eliminate this lack of success, as other practitioners report that they are quite successful, and have shown me corroborative evidence in the shape of pre-operative and post-operative X-rays.

We have much greater satisfaction with cases of ulcerative stomatitis (Vincent's Disease). A number of cases of this type have been referred for light treatment and in all cases we have had a good degree of success, the condition clearing up rapidly provided that we used the same technique as in our cases of periodontitis. Where it was possible, the surface tissues were cleaned off and the mouth washed thoroughly before exposure so as to obviate interference with the irradiation. In cases where pockets are present, where it is impossible to reach with direct irradiation, it has been found expedient to use a 1% solution of eosin upon the tissues prior to exposure; eosin being a photosensitive dye will carry the rays into crevices that would be impossible to reach directly.

The pain in these cases is often extreme and is quickly alleviated by the use of ultraviolet. The evidence of success in the cases treated, whether for post-operative extraction pains, periodontitis, or Vincent's Disease, is provided by clinical results, all of which is judged by the dentist operating the Kromayer, the Chief of the Dental Staff, and the Staff Resident Dentist.

Wm. L. Finlay, D.D.S.,
Toronto Western Hospital,
Dept. of Physio-Therapy,
Toronto, Canada.

MISCELLANEOUS COMMENTS

I am very pleased to testify to the very satisfactory results of the use of my Kromayer Lamp for ultraviolet therapy. I have used this lamp for two years.

A large part of the practice in this office is exodontia, and we have made it a matter of general routine to apply this lamp into the sockets immediately after extraction. This has eliminated approximately 70% of former post-operative treatments. We have also used the lamp, along with the proper applications of medicaments, in the treatment of both mild and severe cases of gingivitis.

We have used the lamp extensively in the treatment of neuralgia, where the cause has been obscure and the radiographic examination failed to disclose any information. It has been interesting to note that the use of the Kromayer Lamp for several successive daily treatments has eliminated this neuralgia without apparent recurrence.

I shall be very happy to have any one interested in the use of this lamp come to my office at any time to see its practicability.

(Signed) Edmond F. deMonseigle, D.D.S.
Electric Building,
Asbury Park, N. J.

Have reduced post-operative pain and infection about 90% by using light treatment after all difficult extractions.

Dr. A. A. Wollmann,
Huron, S. D.

We have made many tests in the same mouths and find that extraction followed by irradiation with our quartz light will heal up much more rapidly and with less or no pain, than extractions without irradiations.

(Signed) Ernest Pfennig, D.D.S.
D. D. Peterson, D.D.S.
Chicago, Ill.

I get good results in all Vincent's Infection cases, using it (ultraviolet light) in severe cases three consecutive days in order to get all spores and prevent recurrence.

I have experimented by using in fairly clean mouth cases simply spraying interproximal spaces with most any ordinary mouth wash and use light treatment 30 seconds to each position buccally and lingually and labially using six positions on each jaw.

For impacted extractions to form good clot in cavity I use 3 minutes after swabbing with S. T. 37 and have never had a dry socket case or pain after extraction and I have done hundreds of same.

I also use same for all cases where I scale teeth in treatment of inflammation of gums, 30 seconds to each position.

(Signed) O. B. Hinz, D.D.S.
Oshkosh, Wis.

I use ultraviolet in all my surgical work and would not be without it. My post-operative treatments are reduced to a very small minimum. When there is a flare-up the inflammation and pain can be checked by one or two treatments, usually one.

I have had dry-sockets come in from other operators and corrected the condition in one treatment.

I find it very helpful in conjunction with other methods, in the treatment of pyorrhea.

Dr. F. A. Niles,
Madison, Wis.

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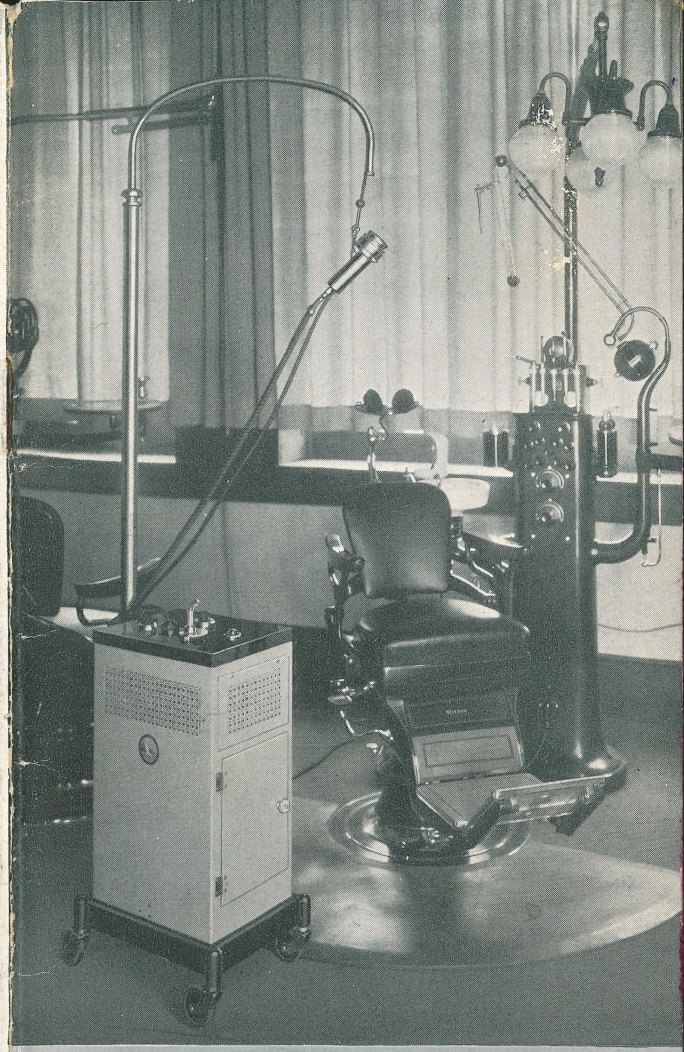

WHAT DENTISTS KNOW ABOUT ULTRAVIOLET THERAPY

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