

Massachusetts General Hospital Dental Clinic

By Kurt H. Thoma, D.M.D.

Oral Surgeon and Chief of Dental Department, Massachusetts General Hospital, and Professor of Oral Surgery, Harvard School of Dental Medicine

THE Massachusetts General Hospital was incorporated by an act of the Legislature in 1811. It is a private institution supported solely by voluntary contributions and receipts from certain paying patients. It consists of three main divisions: the General Hospital for those unable to pay; the Baker Memorial for people with moderate means, who may be referred by any doctor, but attended only by members of the staff; and the Phillips House for private patients.

The Right Reverend Henry Knox Sherrill, Bishop of Massachusetts, in the "Foreword" of the *History of the Massachusetts General Hospital*, written by Frederick A. Washburn, M.D., said: "The Massachusetts General Hospital has an intangible quality impossible to describe, an atmosphere created through the devotion of literally thousands of men and women over a period of more than a hundred years. In the corridors and wards, we feel the great and noble traditions of high purpose and great accomplishment."

The hospital has seen many developments since its foundation, such as the discovery of anesthesia, the introduction of antiseptic and aseptic methods of surgery, the invention of the X-ray and its application to diagnosis and therapy, and the use of chemotherapy for the prevention and treatment of infections. The laboratories have been constantly expanded to permit research on an ever increasing scale, and the staff organization has undergone fundamental changes including the employment by the hospital of men associated with Harvard Medical School, as medical and surgical chiefs who serve with their assistants practically on a full-time basis.

Dentistry was recognized as an important branch of the Science early in the history of the Massachusetts General Hospital. It was in this hospital on October 16, 1846 that the use of anesthesia was successfully demonstrated by a dentist, Thomas William Green Morton. A statement about the treatment of fractured jaws made by George Hayward, M.D., Surgeon of the Hospital and published in the *Boston Medical and Surgical Journal* in 1838, is an example of the beginning of recognition and regard for dental cooperation in the surgical field. Dr. Hayward wrote: "When the bone is not comminuted and there are teeth on each side of the fracture, the ends of the bone can be kept in exact apposition by passing a silver wire around these teeth... It requires mechanical dexterity to apply it neatly, but in large cities we can avail ourselves of the skill of the dentist for this purpose." The Trustees of the Hospital, in their report for 1868, in speaking of the outpatient department, said: "This department has been enlarged during the year by the addition of a Dental Service in connection with the Dental School of Harvard College." In 1872 Dr. Benjamin Shaw, the seventh superintendent and resident physician, proposed to the Trustees that a new office, viz., that of "Dentist" be established in the outpatient department, because the faculty of the Dental School of Harvard College have, for a period of three years, carried on a successful school, its instructors doing a large amount of gratuitous work for dental patients in the outpatient rooms of the hospital. The gentlemen would like to have one of their number appointed to office, with proper rules and duties prescribed.

The office of "Dentist" was created, and Charles Wilson, D.M.D. was the first to be appointed to the position. He wrote the Trustees asking that the title be changed to "Dental Surgeon," inasmuch as the one having the care of the eyes is styled, "Ophthalmic Surgeon." The change of title appears in the staff lists.

Following this, the Dental Faculty conducted for several years at the Massachusetts General Hospital an infirmary at which all kinds of dental operations were carried out gratuitously, except for those in which gold foil was used. The number of patients increased beyond convenient limits, and were a considerable expense to the hospital. In 1883 President Charles W. Eliot of Harvard College suggested to Dean Thomas H. Chandler of the Dental

School that a clinic be opened in the abandoned building of the Harvard Medical School adjacent to the outpatient department. A letter by Dean Chandler addressed to the Trustees informing them of this decision ended with the following paragraph: "Allow me to thank you and your Board of Trustees for all your kindness to us in the past, . . . and also to hope that we may still be permitted to call ourselves, and to be, the Dental Infirmary of the Massachusetts General Hospital. The distance of a few rods need not entirely sever our connections, and in the future as in the past, we can still be mutually useful one to another."

It was then decided that a direct connection should be made between the Dental School Building and the hospital grounds

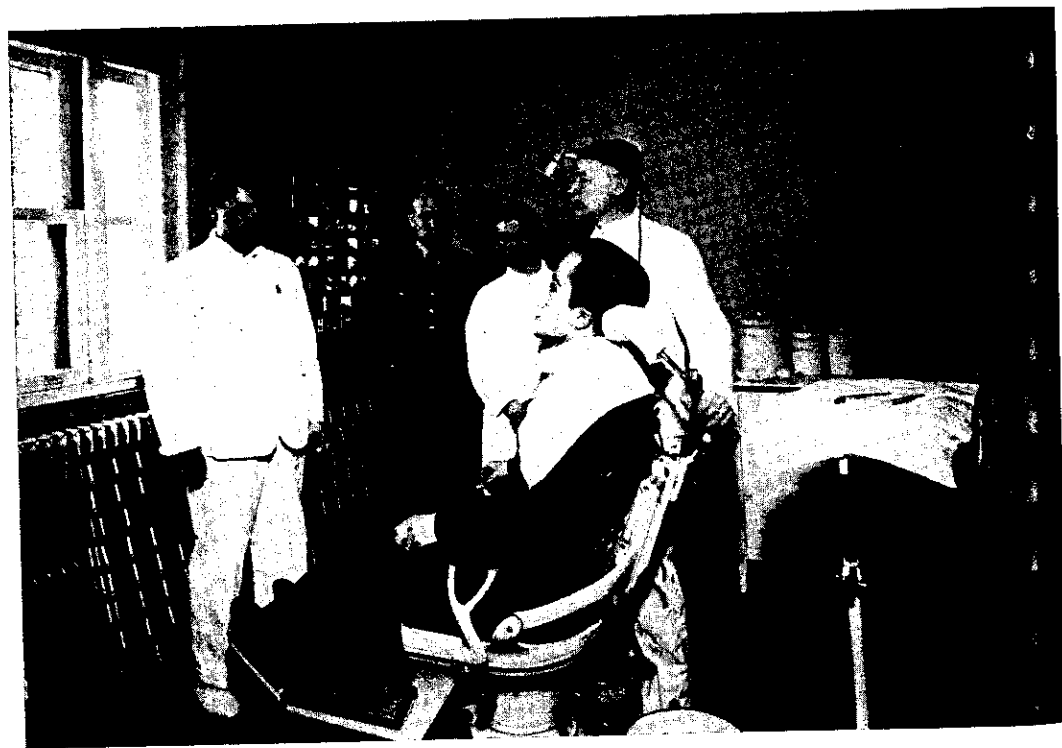


Fig. 1. Consulting and treatment room of the Chief of the Department. A patient with leontiasis ossea is being discussed with the house officers, Drs. Cascario and Bacevicz. A guest, Major Redlich, D.C., U.S.A., is looking on. The patient is to have an osteotomy on the mandible to correct the marked protrusion.

by means of a "gate opening directly back of the door from the Old Horse Shed into the grounds," and that the dentist receive a key to the North Anderson Street gate to the hospital grounds, a privilege granted to other members of the hospital staff.

Certain dentists connected with the school were appointed to the hospital staff. This relationship was reciprocal, as members of the medical faculty and the Massachusetts General Hospital held similar positions on the dental school faculty, until the school moved to its new quarters on Longwood Avenue in 1909. Surgery was taught to dental students as it was to medical students in the latter part of the nineteenth century, and William B. Hills, M.D. (1874), Associate Professor of Chemistry at the Medical School, served on the first administrative board of the Dental School.

This relationship between the dental and medical schools was a distinctive feature of dental education at Harvard, and was in contrast to the educational philosophy of many other dental schools, which were started and developed independently with the result that dentistry became an autonomous profession. This was adequate for the period when dentistry was purely a mechanical art, but as it developed and made claims to recognition as a profession, it became evident that the dentist needed a medical background comparable to any other specialist in medicine. Hence the return to the original plan by the Harvard School of Dental Medicine.

The Massachusetts General Hospital, on February 19, 1943, established a close association with the Harvard School of Dental Medicine. Thus a valuable relationship between dentistry and medicine has been renewed, and should benefit both institutions.

Prior to this arrangement, the Dental Clinic was part of the Outpatient Department. In 1910 a Dental Surgeon and Assistant Dental Surgeon were appointed,

while in the staff list for 1911, a Dental Surgeon, and six Dental Surgeons to the Outpatient Department were named.

On July 30, 1914, the general executive council approved the recommendation of the Dental Department that the service rendered by the Dental Clinic should be limited in the following way:

- First: Relief of pain to anyone applying for relief.
- Second: Extraction of teeth and treatment of surgical conditions of the mouth of those applying.
- Third: Treatment of patients referred from other clinics of the Hospital.
- Fourth: Treatment of house patients, nurses, and employees, as may be necessary.
- Fifth: Treatment of a selected group of school children.

A hygienist was added to the Clinic in 1923 to give prophylactic treatments to patients at the Hospital. In 1929 three sessions a week were held, and since August 1, 1932 these were increased to five. In this year, 2,822 patients were treated. Today the staff of the Dental Department consists of an Oral Surgeon and Chief of the Department, ten Dental Surgeons, and twenty-eight Assistant Dental Surgeons, and two house officers. New aspirants for staff membership are admitted as graduate assistants. The department is divided into an Outpatient Department and the House service.

The House Service

The house service is the direct responsibility of the Oral Surgeon and Chief of the Department, who serves on a half-time basis. He sees all the oral cases that come to the Emergency Ward, answers consultations requested by other services, operates on patients admitted to the house, and is responsible for their after care. The hospital has provided space which has been trans-



Fig. 2. Office and Library. The Chief of the Department discusses with the House Officers the treatment of condylar fractures.

formed into a streamlined consulting and treatment room (Fig. 1), laboratory, and office for the chief of the department and his secretary (Fig. 2). It contains all the latest equipment, a small library of books on anatomy, pathology, and oral surgery, and some of the more important medical and surgical journals. There is a Kodachrome collection of slides of mouth diseases and operative procedures which constitute a constantly growing record of the interesting cases, and is used to instruct interns and students; it is of course available to staff members and visitors.

The surgical executive committee of the hospital has assigned beds in the Surgical Wards and the Emergency Ward for oral cases, and the operations are performed in the regular operating rooms of the White Building. A view of one of the operating rooms from an overhead observation chamber is shown in Fig. 3. The illustration shows an operation in progress under pentathol anesthesia on a patient who had sustained fractures of both condyles and the jaw; these are being reduced and immobilized by skeletal fixation.

In order not to interfere with the schedule of other departments, the hospital has arranged for oral surgical operations to be

performed on Tuesday and Friday afternoons; emergency operations, of course, can be arranged on mornings of any other day.

The Outpatient Department

The Outpatient Department continues to give splendid service. It consists of dental surgeons and assistant dental surgeons; one group is assigned to each morning clinic and is in charge of a chief of the day (Fig. 4). The chiefs of the day are, for Monday, Dr. Glenn W. Lawrence, for Tuesday, Dr. Harold A. Carnes, for Wednesday, Dr. John C. Stanton, for Thursday, Dr. F. Chester Durant, and for Friday, Dr. John A. Breen. In addition the following have been appointed dental surgeons: Drs. Brigham, Dempsey, Rae*, Strock*, and Weisberger. The list of assistant dental surgeons includes: Drs. Bloom, Bratt, Cosgrove, Crowley, Doherty,* Dyer, Endee, Feeney, Forbush, Foss, Godfrey, Gove, Greene,* Holland,* Levitan, Noss,* Parker, Phillips, Polansky, Reith, Rhodes,* Seyfarth,* Shangraw,* Soares, Steaples, Sweetnam, Thompson, and Wyman. Those with an asterisk have been granted a leave of absence because of military service.

Special clinics are being developed. A clinic for mouth diseases and medicodental relationships is held every Thursday by Dr. David Weisberger.

In the outpatient clinic ambulatory patients only are treated. These are admitted either through the outpatient department, or are referred from other departments in the hospital. In 1943 a total of 4,476 patients have received treatment by the outpatient staff. Although local anesthesia is used extensively, facilities are provided for the administration of general anesthesia, which is given by those members of the department who have taken the course in anesthesia at the Massachusetts General Hospital.

Prophylactic treatments given by Lillian Peck, D.H., greatly improve the oral

health of patients in other departments of the hospital: 1,178 such treatments were given in 1943.

Definition of Oral Surgical Diseases

The surgical executive committee of the hospital has recently agreed to admit patients to the beds assigned to the house staff of the Dental Department, upon recommendation from the Outpatient Department, or with acceptable recommendations in writing from outside dentists or physicians, upon the following diagnoses:

- Swelling of the jaw
- Fractures of upper and lower jaws
- Jaw deformities
- Temporomandibular disturbances
- Cysts and local tumors of mouth and jaws
- Salivary stones
- Facial neuralgic disturbances
- Dental anomalies
- Mouth diseases and lesions; Vincent's infection

They, in addition, declared the following list to be definite oral surgical operations:

- Extraction of teeth
- Extraction with alveoplasty
- Odontectomy (excision of impacted teeth)
- Treatment, incision, and drainage in cellulitis, sublingual, submandibular, and submaxillary abscesses, when of dental origin. (Special assignment for Dr. Thoma and Dr. Nathanson)
- Reduction of fractures of upper and lower jaws, including treatment of lacerations of the face
- Treatment of osteomyelitis, upper and lower jaws
- Arthroplasty and osteoarthrotomy for ankylosis of the mandibular joint
- Osteotomy for congenital and acquired deformities of the jaw
- Excisions of bone cysts and local tumors of the upper and lower jaws, when referred from the Tumor Clinic

Treatment of diseases of the soft tissues of the mouth

Excision of abnormal frenum of the lip and tongue

Excision of cysts of the mucous glands, and cysts and stones of the salivary glands.

Internships

The department at present is entitled to two house officers, one at the expense of the hospital, the other at the expense of the Harvard School of Dental Medicine. The appointments of house officers are made on recommendation by the Chief of the Department. Aspirants must be graduates of a Grade A dental school, and present a curriculum vitae, a transcript of their dental school record, a recommendation by the dean of the school or chief of the oral surgery department, and are personally interviewed. The appointment



Fig. 3. Looking from an Observation Chamber into the Operating Room where Dr. Thoma and his assistants, Drs. Cascario and Bacevicz, are reducing a multiple fracture of the mandible, applying skeletal fixation under pentothal intravenous anesthesia.

is for one year. Those completing the term of appointment satisfactorily will receive a certificate from the Massachusetts General Hospital.

Dental house officers serve alternately for a two-month period in the outpatient department and on the house service. In addition, they receive training in anesthesia, being assigned for six weeks to the Anesthesia Department of the hospital.

While serving in the outpatient clinic, the house officer receives training under the direction of the respective chief of the day in the morning. In the afternoon he attends operations in the house on the two days set aside for these; on the other days he takes care of the teeth of patients treated in the Tumor Clinic.

When on house service, he receives training in oral surgical procedures. He is responsible for all patients admitted to the house, and takes charge of the consultations needed, the X-rays to be taken, arranges for the anesthesia, and prepares the instrument list for the particular operation to be performed. He assists at operations and takes charge of the postoperative treatments, making rounds with the chief of the clinic, and reporting to him daily on the condition of the patients. After the patients are discharged from the house, he takes care of them in the Outpatient Department. He also answers house consultations and reports the findings to the chief of the department, who decides on the disposition of the case. He is on call constantly for emergency cases and consults the chief regarding the disposition of such patients. He also attends special teaching conferences, and when available, presents cases for discussions. In addition, he prepares a program in advance for the bimonthly dental conference.

Teaching and Research

As a teaching procedure, the Massachusetts General Hospital presents cases at medical and surgical rounds and at special

conferences which are held at stated times every week. The dental cases treated by the house staff are made available in a similar manner. Fractured jaw cases are presented at "fracture rounds," Friday mornings; osteomyelitis cases at "osteomyelitis rounds," Wednesdays; and oral tumors at "tumor clinic" on Tuesdays. At surgical grand rounds which is held Thursday mornings, the dental department presents unusual or interesting cases in the same way as other divisions of the surgical department. This relationship makes for better understanding of dental and oral surgical problems by the medical men, and certainly offers a liberal education to the staff and house officers of the dental department.

On the second and fourth Thursdays of each month from 8 to 9 o'clock a special dental conference is held in the lower amphitheater of the outpatient department. Here the entire dental staff has an opportunity to discuss the diagnosis, treatment, and pathologic findings of cases that have been treated either in the outpatient clinic or the house. The patients and their roentgen films are shown, and clinical and microscopic slides are presented by means of a stereopticon. Cases are presented either as a diagnostic problem, or to show the result of treatment received at the hospital. Guests are always welcome at these meetings.

Investigative work may be carried on by any member of the staff as well as by the interns. Drs. Durant and Weisberger are studying "acute gingivitis, especially that caused by Vincent's infection." Dr. Weisberger is about to complete a study of the abnormalities of the salivary glands from a clinical aspect, by means of sialograms, with a correlation of the pathologic findings. I am studying the application of skeletal fixation and internal wiring fixation to fractures of the mandible and middle third of the face; also the treatment by neuro-rhaphy of cases of prolonged anesthesia and paresthesia caused by poorly reduced

fractures and other surgical procedures; and the involvement of the jaws and teeth in skeletal diseases.

Biannual Publication of Case Reports

A publication entitled, "The Clinic of the Dental Department of the Massachusetts General Hospital and the Department of Oral Surgery, Harvard School of Dental Medicine" will be issued every six months. The entire Oral Surgery Section of the *American Journal of Orthodontics and Oral Surgery* is given over to the Massachusetts General Hospital Number in April and October. It is edited by myself and the

house officers whose duty it is to collect and prepare the material. The first issue was published in October, 1943 and contained 78 pages with 91 illustrations. The second issue will appear in April, 1944.

Other publications were made during 1943 from the following members of the department: Drs. Weisberger, Carnes, and Thoma.

The Dental Department of the Massachusetts General Hospital does not only give its service to deserving patients, but in association with the Harvard School of Dental Medicine, uses its clinical material for teaching and investigations.

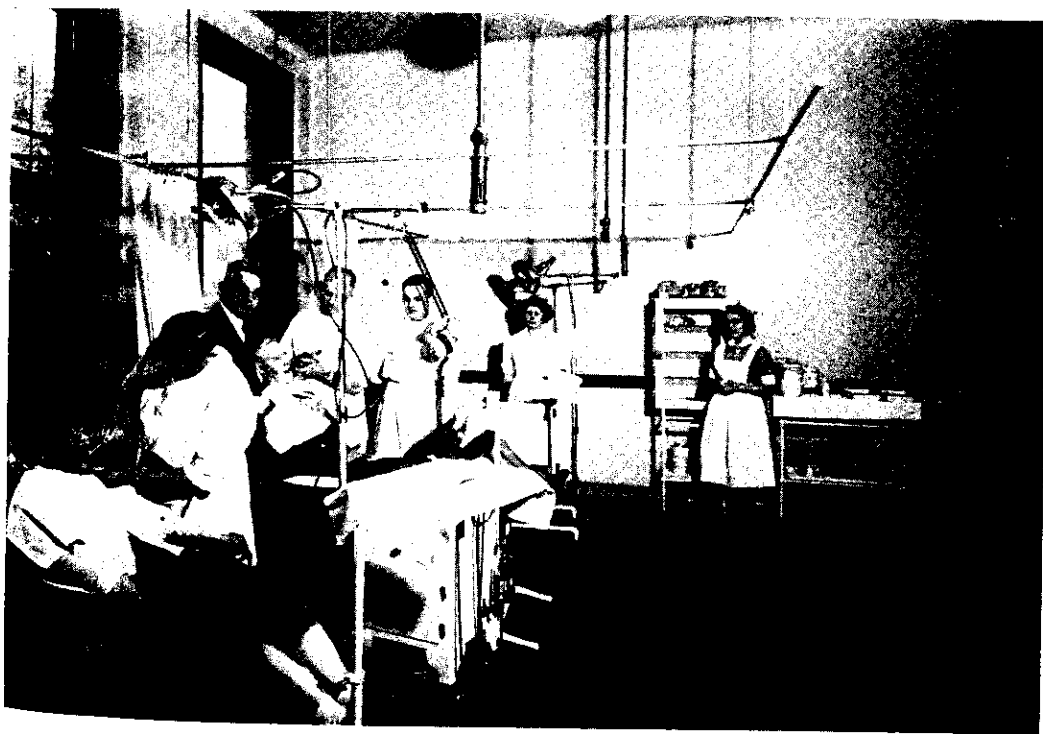


Fig. 4. The Outpatient Clinic on Monday morning, with Dr. Endee, Dr. Thoma, Dr. Lawrence, Dr. Sweetman, and Miss Peck.