# The ROYAL CANADIAN DENTAL CORPS Quarterly

VOLUME 9 NUMBER 1 APRIL 1968

## Table of Contents



## The RCDC Quarterly


Published by authority of Brigadier-General BP Kearney


This publication serves as a means for the exchange of ideas, experiences and information within the Royal Canadian Dental Corps. Views and opinions expressed are those of the authors and are not necessarily those of the Director General of Dental Services or the Department of National Defence.



## Subscription Rates

The RCDC Quarterly may be subscribed for at $4.00 per year by writing to:

Director General of Dental Services
for the Canadian Forces,
Canadian Forces Headquarters,
Ottawa 4, Ontario.

## Cover Photograph

RCDC Bonspiel - 1968

The National Naval Medical Center

The Naval Dental School occupies the left wing of the National Naval Medical Center. This section houses the clinical and administrative department of the School.

## THE US NAVAL DENTAL SCHOOL

The Naval Dental School is one of six separate commands of the National Naval Medical Center, an imposing structure located on a 242-acre site in the rolling hills of Maryland, about a mile north of Bethesda, Maryland. President Franklin D. Roosevelt made the first rough sketch of the elevation and ground plan for the main building and chose the site, then a run-down farm across Rockville Pike (U.S. Highway 240) from the National Institutes of Health. Below the slight elevation where the new building would stand was a springhouse, its tiny pool fed by natural springs. Being reminded of the Pool of Bethesda, the President directed that the springs be preserved and that the pool be made a part of the landscaping.

The Secretary of the Navy officially commissioned the newly constructed buildings in February, 1942, and designated the medical and dental facilities that were to occupy it as the National Naval Medical Center. On the 100th anniversary of the Bureau of Medicine and Surgery, August 31, 1942, President Roosevelt formally dedicated the Center.

At that time, the Center included only the Naval Hospital, the Naval Medical

*Editor's Note

The January 1968 issue of the Quarterly contained a feature article on the Walter Reed Army Medical Center and the opportunities in specialized training offered by that Institution to RCDC Officers over the years.

This issue of the Quarterly features a "sister" article on the U.S. Naval Dental School in recognition of the invaluable training in the form of both short and extended post-graduate courses which members of the Corps have been privileged to attend.

School, and the Naval Dental School. Later, additional buildings were constructed on other parts of the grounds for medical facilities commissioned at later dates. These are the Naval School of Hospital Administration, the Naval Medical Research Institute, and the Navy Toxicology Unit, as well as the following tenant activities: The Naval Medical Data Services Center, the Children's Diagnostic and Study Unit, and the Armed Forces Radiobiology Research Institute.

Because the Naval Dental School is affiliated with Georgetown University as an off-campus branch of the Graduate School, its faculty includes instructors from the University as well as staff dental officers, many of whom hold diplomas or certificates from the American specialty boards in dentistry. Staff dental officers serve on the faculties of Georgetown and other civilian dental schools, and outstanding educators in various fields from throughout the country lecture at the Naval Dental School.

Officer Education

There are no undergraduate courses, for the School enrolls only carefully selected officers who have been practicing dentistry in the Navy for at least five years.

Courses offered during the first year of the Graduate Program are of 10 months' duration and are popularly called The Graduate Courses. During this first year, graduate students learn the latest techniques of practicing and teaching dentistry. They also study biomedical sciences--biochemistry, anatomy, pharmacology, microbiology, physiology, and pathology--for which they receive 13 credits toward a Master of Science degree from Georgetown University. At the same time, the student officers work with their instructors in the clinics and laboratories.

Two of the three Dental School buildings (122 and 123). The educational programs are conducted in Building 122, and a new preventive dentistry clinic operates in Building 123 (far right).

Three laboratories are staffed by scientists who devote their time to research in biochemistry, microbiology, and oral pathology. Since the Naval Dental School provides ar oral pathological service for the entire Navy, dental officers throughout the world send tissue specimens, accompanied by descriptions of the lesions and case histories, to the Oral Pathology Department for diagnosis. By studying these specimens many of which they would be unlikely to see elsewhere, students learn the clinical and microscopic signs that will help them diagnose rare and unusual diseases. Student officers also study research methodology and biostatistics while working on

a research study of their choice.

Those who show special aptitude and skill during the first year of the Graduate Program are given advanced training in one of the specialties.

All dental officers must continue their education to keep informed of the many new developments in dentistry. Each year, the Naval Dental School offers 1-week courses in 11 dental specialties to dental officers of all the U.S. Armed Forces, the Public Health Service, the Veterans' Administration, and the Royal Canadian Dental Corps. It also makes 7-week courses available to officers of the Royal Canadian Dental Corps, in oral surgery, periodontics, and prosthodontics. Since 1949, about 100 officers of the Royal Canadian Dental Corps have attended continuing education courses, observerships, and specially designed courses.

For those who cannot attend courses in residence, the School has a correspondence course program of professional courses and a single course on the Navy's administrative practices as they apply to dentistry. These courses are developed and administered by the School for Career and Reserve dental officers of the U.S. Armed Forces; and the enrollment of dentists in other Federal agencies and the armed forces of other nations is encouraged. At present about 30 officers of the Royal Canadian Dental Corps are enrolled.

The following professional courses are available:

Advanced Speeds in Operative Dentistry, NavPers 10420-A
Complete Dentures, NavPers 10763-1
Diagnosis of Lesions of the Oral Mucous Membrane, NavPers 10421
Endodontics, NavPers 10407-A
Fixed Prosthesis, NavPers 10410
General Oral Surgical Procedures and Exodontia, NavPers 10729-A
Health of Supporting Tissues in Complete Denture Construction, NavPers 10419
Oral Diagnosis, NavPers 10739-1
Periodontics, NavPers 10758-1
Removable Partial Dentures, NavPers 10764-A
Removable Partial Dentures: Planning and Design, NavPers 10511

A new course in Pharmacotherapeutics in Dental Practice is under development and the present course in Endodontics is being revised. At any given time, some 1000 dental officers are enrolled in the professional courses.

## Enlisted Education

With the help of capable assistants, naval dental officers can more than double their professional workload. To train these assistants the Navy conducts schools in dental assisting and prosthetic techniques for enlisted personnel. After receiving such training, qualified dental technicians may attend one of three advanced specialized schools conducted at the Naval Dental School.

The Research Assistant School offers courses in the care of experimental animals and in assisting dental officers engaged in research involving experimental pathology, experimental surgery, microbiology, biochemistry, and microphotography. In the Maxillofacial Prosthetic School, students learn to make artificial plastic eyes and various other prostheses for the mouth, head, and face; to create these prostheses, students must have artistic ability and sensitive color perception. The Dental Repair School meets the Navy's need for men to install, maintain, and repair all types of dental operating room and laboratory equipment on ships and at shore stations. Among the qualifications for this school are manual dexterity, mechanical aptitude, and completion of a course at Electrician's Mate School.

## Other Educational Functions

Always seeking to improve the School's educational programs, the staff pioneered

in the use of audiovisual education. Today, television is an everyday teaching medium, and the School's color motion pictures, television programs, and videotape recordings are used Navy-wide to teach subjects ranging from basic oral hygiene to complex professional techniques. A number of slide-illustrated lectures and microscopic slide collections used in the School's courses are packaged and loaned for individual study by dental officers at other facilities. The School also produces scientific exhibits which are shown at major dental meetings in the United States and foreign countries; many of these have won national awards.

After welcoming the RCDC second lieutenants who visited the Naval Dental School in August 1967, Captain Kenneth L. Urban, Dental Corps, U.S. Navy, Commanding Officer, appears with the group as they started on a tour of the School's facilities. On Captain Urban's right is Major A.G. Taylor, RCDC, who was in charge of the tour.

Since dental personnel render first aid in battle as well as in operating room emergencies, the staff develops functional training aids for casualty care training, some of which are used Navy-wide. Among these is Mr. Disaster, a lifesize model military casualty with an artificial heart and synthetic blood, who responds to treatment of fractures, burns, hemorrhages, and other injuries in much the same way a human being would. Mr. Disaster is now manufactured commercially and used in casualty care training by all the Armed Forces, the Civil Defense Agency and many civilian organizations.

In addition to its educational functions, the School provides dental care for military personnel of the National Naval Medical Center, inpatients of the Naval Hospital, and personnel referred from other naval activities; and conducts an expanding preventive dentistry program for military personnel and their dependents.

Besides preparing and presenting formal courses of instruction and carrying on a professional practice in the School's busy dental clinics, staff members serve as

officers of many professional societies; speak at local, national, and international society meetings; conduct research and prepare reports for official use by the Navy and articles for publication in dental journals. Such research led to the lifelike artificial plastic eye that moves with the patient's natural eye, developed by the Maxillofacial Prosthetic Clinic; which also makes prostheses for victims of cleft palate and shattering wounds of the face, and various other body parts that help patients resume normal lives. The pioneer model of the air turbine handpiece now used in all dental operating rooms throughout the world was developed in the Dental School's Repair School, while many other research projects have furthered dental knowledge or contributed to improved dental practices, techniques, and equipment.

Thus, through its educational, clinical, and research programs, the Naval Dental School contributes in many ways to the improved health of US Navy and Marine Corps personnel and others throughout the world.

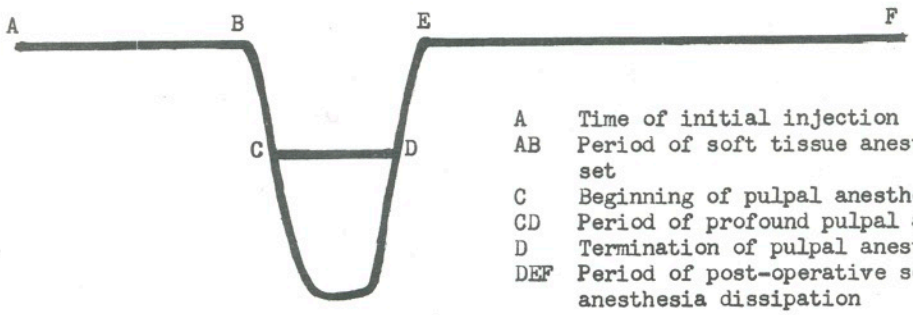
- - - - - - - - - - - - - - - - - -

A NEW ALL PURPOSE ANESTHETIC
PRILOCAINE HYDROCHLORIDE 4% WITH EPINEPHRINE 1:200.000

LCOL A.G. Andrews, CD, DDS

The ideal local anesthetic solution which possesses all of the attributes of rapid onset, complete anesthesia with every injection and rapid post operative dissipation free from toxic side effects, does not exist. All local anesthetics being used in Canada, however, possess these individual ideal entities in varying degrees and pharmacologic anesthetic research is continuously directed towards improving the effect or nature of each parameter (Fig. 1).

Fig. 1




The Parameters of Anesthesia

This may be accomplished by: altering the chemical structure of the free anesthetic base, employing totally different chemical structures; by increasing or decreasing the percent concentration of the vaso constricter; by elimination of the vaso constricter; by combining chemically different vaso constricters; or by modify-

ing the percent concentration of the anesthetic solution itself. Unfortunately, when a refinement is acquired in one parameter an undersirable effect often results in another, for such is the reactive nature of human tissue to chemical solutions.

Prilocaine hydrochloride 4% with epinephrine 1:200,000 (CITANEST FORTE*) is a new local anesthetic which was created by the manufacturer to produce better or different effects in three parameters, when used for local infiltration injections. These features were defined as (1) faster onset, (2) same depth of pulpal anesthesia but a shorter operative period, and (3) shorter post-operative dissipation period than a designated standard lidocaine hydrochloride 2% with epinephrine 1:100,000.

## Composition and Properties

Prilocaine is similar to lidocaine in that both are amides but chemically dissimilar in that prilocaine is a toluidine derivative and lidocaine, a xylidide derivative. It is slightly soluble in water and freely soluble in alcohol. Aqueous solutions are stable and can withstand boiling and auto-claving without decomposition.[2]

## Animal Toxicity and Human Tolerance

In animal studies, Wiedling[2] demonstrated that the acute toxicity of prilocaine was about 40 percent less that of lidocaine and it was therefore surmised that the safety coefficient was proportionately increased. Englesson et al[3] investigated human tolerance to intravenous injections of both lidocaine and prilocaine in twenty volunteers by means of a double blind study and provided evidence that prilocaine was tolerated twice as well as was lidocaine.

## Clinical Trial

Prilocaine hydrochloride 4% with epinephrine 1:200,000 was recently evaluated in a Royal Canadian Dental Corps clinical trial to examine its relative performance in three parameters with that of the standard now being used, lidocaine hydrochloride 2% with epinephrine 1:100,000. The three parameters were designated, onset, operative, and post-operative periods.

The study was carried out in four different clinics and the double blind method was employed. Each of the participating dentists was instructed to employ a common injection technique, and to standardize the total volume whenever it was practical to do so. Characteristics pertaining to the patient and to the procedure were noted on a standard protocol sheet, as were the observations of grade of anesthesia, onset and duration of soft tissue anesthesia, and side effects.

## Results

### A. Patient and Practice Characteristics

As shown in TABLE I most of the patients were male, were in good general health and required restorative procedures primarily. The mean age of the group was 32 years. Analysis of the practice characteristics (TABLE II) reveals that the average injected was 1.8 ml for infiltration, 1.9 ml for inferior alveolar block and 1.7 ml for mental block. The average time from injection to completion of the procedure was 35 minutes.

### B. Frequencies of Various Grades of Anesthesia

The two solutions were used in a respresentative number of dental operations and included restorative, surgical, periodontic and endodontic procedures with approximately equal success. When the data pertaining to all procedures requiring infiltration were combined (TABLE III) there was no statistical significance between the two solutions.

* CITANEST FORTE 4% (ASTRA Pharmaceuticals)

TABLE I
PATIENT CHARACTERISTICS

| Dental Procedures Performed | No. | % |
|---|---|---|
| Restorative | 663 | 80.9 |
| Extraction | 98 | 12.0 |
| Other Surgical | 3 | 0.4 |
| Periodontal | 7 | 0.8 |
| Endodontic | 14 | 1.7 |
| Miscellaneous or NI* | 22 | 2.7 |
| Restorative & Ext | 12 | 1.5 |

| Age | No. | % |
|---|---|---|
| Under 10 | 0 | 0.0 |
| 10 - 14 | 0 | 0.0 |
| 15 - 19 | 84 | 12.3 |
| 20 - 29 | 224 | 32.8 |
| 30 - 39 | 176 | 25.8 |
| 40 - 49 | 179 | 26.2 |
| 50 - 59 | 20 | 2.9 |
| 60 - 69 | 0 | 0.0 |
| 70 + | 0 | 0.0 |
| NI* | 136 | |

| Sex | No. | % |
|---|---|---|
| Male | 766 | 96.1 |
| Female | 31 | 3.9 |
| NI* | 22 | |

| General Health | No. | % |
|---|---|---|
| Good | 774 | 95.9 |
| Fair | 33 | 4.1 |
| Poor | 0 | 0.0 |
| NI* | 12 | |

| Infection In Area Treated ? | No. | % |
|---|---|---|
| Yes | 759 | 95.3 |
| No | 37 | 4.6 |
| NI* | 23 | |

| No. | Areas Treated | % |
|---|---|---|
| 171 | Upper Anteriors | 21.3 |
| 134 | Upper Premolar | 16.7 |
| 151 | Upper Molar | 18.8 |
| 25** | Upper Quadrants | 3.1 |
| | Total Upper Arch | 59.9 |
| 24 | Lower Anterior | 3.0 |
| 61 | Lower Premolar | 7.6 |
| 219 | Lower Molar | 27.3 |
| 17** | Lower Quadrants | 2.1 |
| | Total Lower Arch | 40.0 |
| 17 | NI* | |

* NI = not indicated; the percentage figures are based on those indicated.
** Either not specified or including more than one segment of arch.

TABLE II
PRACTICE CHARACTERISTICS

| Both Solutions | Average Volume Injected | Average Time From Injection To the Beginning Of Work | Average Length Of Procedure | Average Time From Injection To The Completion Of The Procedure |
|---|---|---|---|---|
| | ml | min | min | min |
| Infiltration | 1.8 | 4.9 | 28.4 | 33.3 |
| Inferior Alveolar Block | 1.9 | 8.5 | 29.3 | 37.6 |
| Mental Block | 1.7 | 6.3 | 23.2 | 29.8 |
| All Injections Combined | 1.8 | 6.2 | 28.8 | 34.9 |

TABLE III

GRADES OF ANESTHESIA OBTAINED WITH INFILTRATION

*DATA FROM ALL PROCEDURES COMBINED*

| Solution | * Lidocaine HCl 2% Epinephrine 1:100,000 | | ** Prilocaine HCl 4% Epinephrine 1:200,000 | |
|---|---|---|---|---|
| | No. | % | No. | % |
| Complete | 213 | 92.6 | 210 | 90.1 |
| Complete Wear Off | 1 | 0.4 | 6 | 2.6 |
| Partial | 11 | 4.8 | 16 | 6.9 |
| Failure | 5 | 2.2 | 1 | 0.4 |
| Not Indicated * | 16 | | 29 | |
| Total | 246 | | 262 | |

* Percentages are based on those indicated.

When the data pertaining to all procedures carried out under inferior alveolar block were combined (TABLE IV), there was no statistical difference between the solutions.

TABLE IV

GRADES OF ANESTHESIA OBTAINED WITH INFERIOR ALVEOLAR BLOCK

DATA FROM ALL PROCEDURES COMBINED

| Solution | * Lidocaine HCl 2% Epinephrine 1:100,000 | | ** Prilocaine HCl 4% Epinephrine 1:200,000 | |
|---|---|---|---|---|
| | No. | % | No. | % |
| Complete | 103 | 79.2 | 114 | 82.6 |
| Complete Wear Off | 0 | 0.0 | 1 | 0.7 |
| Partial | 10 | 7.7 | 12 | 8.7 |
| Failure | 17 | 13.1 | 11 | 8.0 |
| Not Indicated * | 12 | | 14 | |
| Total | 142 | | 152 | |

* Percentages are based on those indicated.

It should be noted, however, that when the frequency of complete anesthesia and that of all other categories combined were compared for the two solutions, there was a larger percentage of failures in the cases treated with lidocaine than in those treated with prilocaine.

C. Soft Tissue Anesthesia

The average durations of soft tissue anesthesia are given in TABLE V. For infiltration anesthesia, this duration was 25 minutes less following the prilocaine solution than following the lidocaine solution, the difference being statistically highly significant.

* Lidocaine HCl - Xylocaine HCl

** Prilocaine HCl - Citanest

**TABLE V**

DURATION OF SOFT TISSUE ANESTHESIA
(Minutes)

(Mean ± Standard Deviation)

| | Lidocaine HCl 2% Epinephrine 1:100,000 | Prilocaine HCl 4% Epinephrine 1:200,000 |
|---|---|---|
| Infiltration | 152.8 ± 36.6 | 127.7 ± 41.9 |
| N = | 219 | 238 |
| | t = 6.78 | P<0.01 |
| Inferior Alveolar Block | 195.2 ± 42.4 | 200.1 ± 49.4 |
| N = | 114 | 124 |
| | t = 0.787 | P is not significant |
| Mental Block | 186.2 ± 28.4 | 133.0 ± 53.5 |
| N = | 4 | 3 |
| All Injections Combined | 167.1 ± 43.7 | 151.9 ± 56.3 |
| N = | 339 | 368 |
| | t = 4.088 | P<0.01 |

No significant difference was observed after inferior alveolar block and the data for mental block were too few for analysis. When the date pertaining to all injections were combined, the duration of soft tissue anesthesia was 16 minutes shorter for the prilocaine solution than for the lidocaine solution, the difference again being statistically highly significant.

D. Anesthesia Onset

The time of onset of anesthesia was defined as the time from injection to the onset of operative numbness. As will be noted in TABLE VI, the time of onset for the prilocaine solution was significantly shorter than the time of onset for the lidocaine solution during both infiltration and inferior block procedures.

E. Side Effects

The number of reported systemic and local side effects was small and no statistical difference between the two solutions was observed.

TABLE VI

TIME OF ONSET OF ANESTHESIA
(Minutes)

(Mean ± Standard Deviation)

| | Lidocaine HCl 2% Epinephrine 1:100,000 | Prilocaine HCl 4% Epinephrine 1:200,000 |
|---|---|---|
| Infiltration<br>N = | 1.9 ± 1.9<br>200 | 1.5 ± 1.5<br>259 |
| | t = 2.74 | P < 0.01 |
| Inferior Alveolar Block<br>N = | 4.4 ± 3.9<br>121 | 3.2 ± 3.0<br>141 |
| | t = 2.69 | P < 0.01 |
| Mental Block<br>N = | 1.3 ± 0.5<br>6 | 1.3 ± 0.6<br>3 |
| All Injections Combined<br>N = | 2.8 ± 3.0<br>327 | 2.1 ± 2.3<br>408 |
| | t = 3.72 | P<0.01 |

F. Overall Impression

The overall impression of the trial solutions is presented in TABLE VII. In this classification the investigator and responsible clinicians took into account the frequency of successful anesthesia, the onset time, the depth of anethesia and any side effects. The data indicate that the classification of a grade of anesthesia as "complete" does not necessarily mean that the same case will also be classified as "excellent" in its general impression. It should be noted that, although the percentages of "excellent" responses were lower than the percentages of "complete" anesthesia, the percentages of "poor" responses were essentially the same as the percentages of "failure" to achieve anesthesia.

TABLE VII
GENERAL IMPRESSION OF ANESTHETIC

| | Lidocaine HCl 2% Epinephrine 1:100,000 | | Prilocaine HCl 4% Epinephrine 1:200,000 | |
|---|---|---|---|---|
| Infiltration | No. | % | No. | % |
| Excellent | 131 | 58.0 | 129 | 54.3 |
| Adequate | 85 | 37.6 | 97 | 40.9 |
| Poor | 10 | 4.4 | 11 | 4.7 |
| Not Indicated * | 20 | | 25 | |
| Total | 246 | | 262 | |
| Inferior Alveolar Block | | | | |
| Excellent | 62 | 53.4 | 74 | 57.4 |
| Adequate | 48 | 41.4 | 45 | 34.9 |
| Poor | 6 | 5.2 | 10 | 7.7 |
| Not Indicated * | 26 | | 23 | |
| Mental Block | | | | |
| Excellent | 2 | 50.0 | 3 | 100.0 |
| Adequate | 1 | 25.0 | 0 | 0.0 |
| Poor | 1 | 25.0 | 0 | 0.0 |
| Not Indicated * | 2 | | 0 | |
| Total | 6 | | 3 | |

* Percentages are based on those indicated.

Summary

The practice characteristics presented in these statistics tend to indicate that most "routine" operative procedures requiring local infiltration anesthesia, involve a relatively short period of time during which tissue is being cut and traumatized. When prilocaine hydrochloride 4% with epinephrine 1:200,000 is employed as the agent it possesses the same relative properties as standard lidocaine hydrochloride and provides adequate anesthetic coverage.

Since the sum of all parameter characteristics for the test solution includes the benefit of relatively shorter duration, it may be concluded that the new agent possesses this additional advantage.

No significant differences were noted for inferior alveolar block anesthesia.

If subsequent trials confirm the results of this evaluation, prilocaine hydrochloride could be classified a reliable short-acting, selective anesthetic solution.

"The opinions expressed in this article are those of the author and do not reflect endorsement of this product by the Director General of Dental Services for the Canadian Forces or the Department of National Defence."

1. Löfgren, N., and Tegner, C. Studies on local anesthetics; a new useful local anesthetic. Acta Chem Scand, 14:486, 1960.

2. Wiedling, S. A new local anesthetic. Acta Pharmacol (KBH), 17:233, 1960.

3. Englesson, S., Eriksson, E., Wahlqvist, S., and Ortengren, B. Differences in tolerance to intravenous Xylocaine and Citanest (L 67) a new local anesthetic; a double blind study in man. First European Congress of Anaesthesiology Proc., Vienna, 2: 1-4, Sep. 1962.

## FACIAL WOUNDS

CAPT JD McCallum, DMD

The treatment of facial wounds in a theatre of war is the prime responsibility of the oral surgeon or dental officer, but the benefits of a team approach to total patient care cannot be emphasized too strongly. The restoration of normal function and contour of the injured structures in the facial area are secondary to the treatment of the effects of the total injury.

Due to the increased efficiency of casualty evacuation, casualties that succumbed to their wounds in the past are now reaching aid stations and hospitals in time for emergency treatment. Therefore increasing numbers of casualties survive their wounds and this is reflected in a concomitant increase in the incidence of facial wounds requiring treatment.

With mandibular fractures outnumbering maxillary fractures by about 2 to 1, the dental surgeon is called upon to play an increasingly important role in the treatment of these casualties.

Facial wounds are usually accompanied by life threatening emergencies and these must be given top priority. Intracranial damage and occlusion of the airway commonly occur simultaneously with, or as a result of the facial wound and must be treated first. The priorities for emergency treatment may be considered to be the following:

a. maintenance of an adequate airway; (if at all in doubt, a tracheotomy should be performed)
b. check hemorrhage;
c. treat for shock;
d. check the level of consciousness.

Treatment for these emergencies is not necessarily the responsibility of the dentist, but he must familiarize himself with them and be prepared to handle them if called upon to do so. Although these are important steps in the treatment of casualties this discussion will deal primarily with the surgical aspect of facial wounds.

High velocity wounds of the face do a great deal of damage to the underlying structures, both to soft and hard tissues. Soft tissues of the face, because of their abundant blood supply, can usually be treated quite successfully if one is careful to observe the principles of: asepsis, careful hemostasis, gentleness in handling tissue, use of correct suture materials, and avoidance of dead spaces.

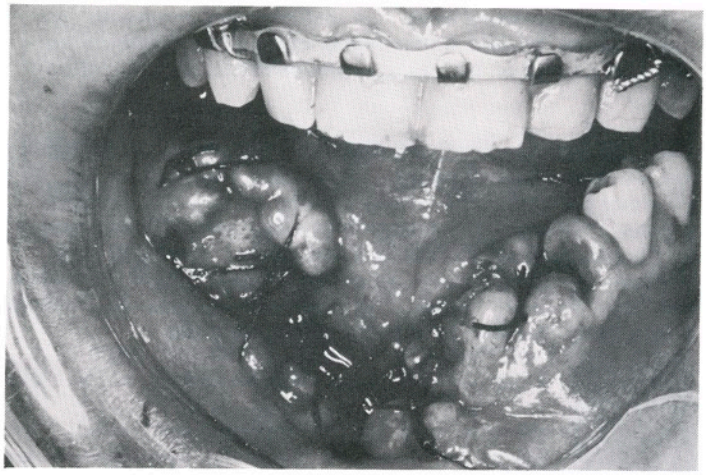


Fig 1

An intra-oral illustration of the exit of a high velocity projectile showing partial post-operative treatment. Note also the type of arch bar used and preferred for intermaxillary stabilization.

Definitive care of facial injuries must await its turn in the priority of treatment, but long delays are seldom necessary. As much as possible should be done at the first operation, not only to obtain the best possible healing, but also to prevent psychic trauma to the patient. With conservative debridement and immediate closure, followed by adequate antibiotic coverage, most facial wounds heal quickly with minimum scarring. Primary care should be accomplished within twelve hours but closure may be delayed for some time if foreign bodies and sources of infection cannot be removed at this time. After sources of infection have been controlled by antibiotic coverage, primary closure may be achieved at a later date. Primary closure without the control of infection may result in sloughing of tissue and a very poor result. Reduction of fractures should not be delayed beyond ten days because fibrous union of bone may make it impossible to achieve accurate reduction. Morale is higher if wounds can be closed early and patients do not have to submit to painful changes of dressings and awkward feeding methods.

Avulsion of bony structures presents a problem different from that of normal fractures. In these cases it is necessary to immobilize the jaws with intermaxillary fixation being careful to obtain the most acceptable occlusion possible. Treatment of the soft tissue wound is carried out, but nothing other than possibly the reduction of associated fractures and debridment of the avulsed bony fragments is done until the soft tissue is completely healed and all infection completely cleared. This may take considerable time.

After all soft tissue healing has occurred and infection controlled, the surgeon will then treat the bony structures with the aim of restoring the function of the jaws and preparing for the best possible support for future prosthetic appliances. It is at this stage that the surgeon must work in close harmony with the prosthodontist for an adequate and functional result.

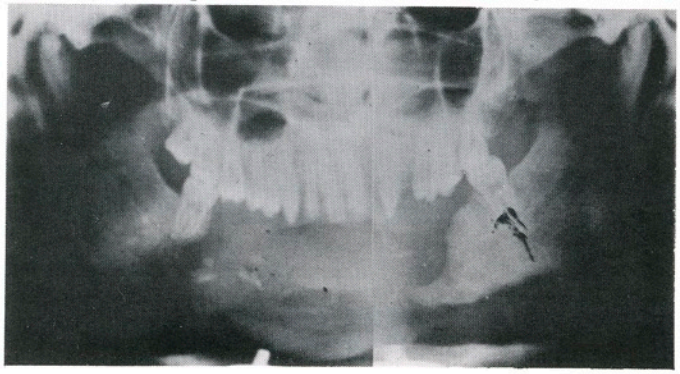


Fig 2

A Panorex radiograph illustrating the amount of bone that may be lost in missile type injuries.

In order to replace the missing bony structures the surgeon has a number of alternatives available to him. Depending on the individual case, the surgeon may regain the structural integrity of the mandible by using a prosthetic implant or a bone graft.

Bone transplants of late have become very successful in treating avulsions of the mandible and these may be done in a variety of ways. Bone may be removed in chips from the ascending ramus of the mandible, the iliac crest, or even a section of rib and relocated in the open area. Freeze dried bone may also be used and incorporated with additional marrow, interspersed throughout the area. The addition of marrow to aid in growth of new bone is under study at present and results of these studies will be forthcoming in the near future. Each case must be considered individually as to the method of bone transplant and the probability of success.

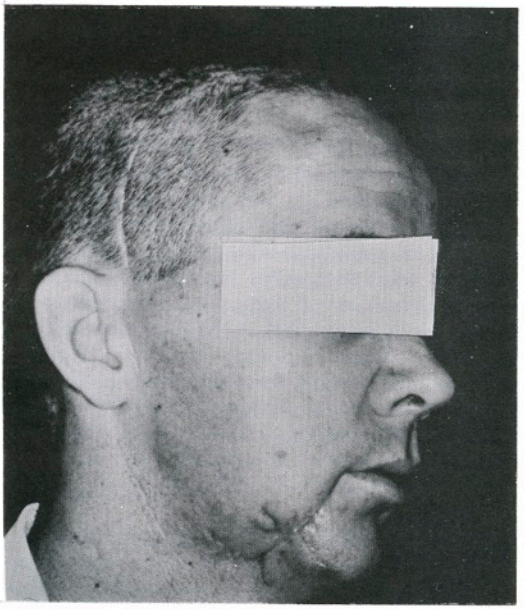


Fig 3

This is a photograph of the same patient as Fig 2 after successful surgery had been performed to replace the missing part of his mandible. The cosmetic and functional results are pleasing and all that remains is revision of the remaining scars by a plastic surgeon.

Treatment of casualties with avulsions of bone is a complicated procedure and should not be attempted by the untrained, but if done by a qualified and experienced oral surgeon a dramatic and functional result may be achieved.


## Summary

In the management of any injury it is essential that the initial evaluation and treatment of the patient be directed toward the effect of the total injury. Total patient care often requires the services of surgical and allied specialties.

Careful cleansing of wounds is a primary essential in their treatment. All foreign bodies should be removed but excision of tissue must be kept to a minimum. Fractured facial bones when exposed through soft tissue wounds should be replaced in their normal position and then immobilized, after which the soft tissue should be repaired.

A successful result following the treatment of facial wounds may depend upon the skill with which normal facial contour and function are restored.



## Acknowledgement

The author recently attended post-graduate training in Oral Surgery at the Naval Dental School, NNMC, Bethesda, and this article is based on ideas and information gained while on course.

## MODIFICATION OF A STANDARD DENTAL CHAIR INTO A POSTURE CHAIR

Major DJ Carmichael, CD, DMD

Many officers in the Corps don't have the pleasure of operating with a posture chair which provides both convenience for the operator and comfort to the patient.

With the expenditure of only a few cents and little time, the standard chair may be modified to serve as a posture chair. The writer has found that the modification described gives more patient comfort because of air spaces, ease of turning the body, etc.; and much more freedom of movement for the operator because of retention of the standard head rest, back adjustment and arm adjustment.

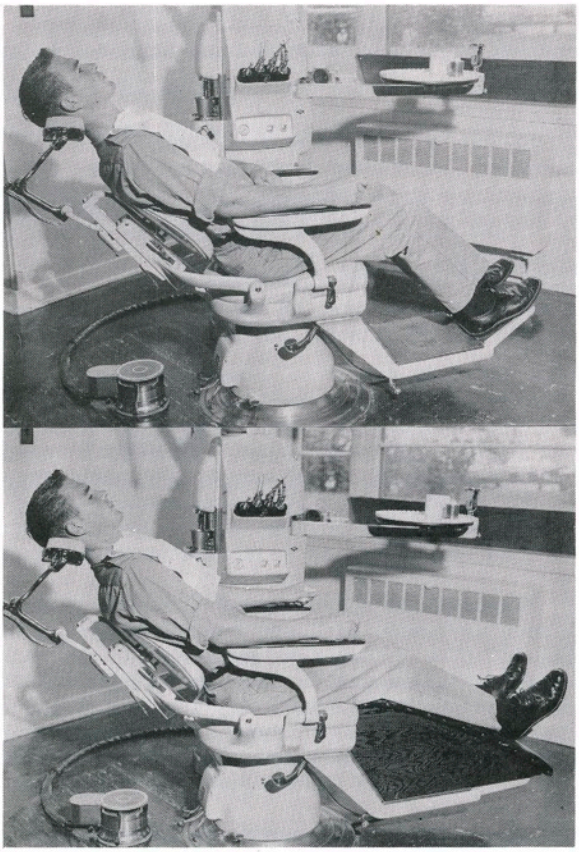


Fig. 1

standard electric chair

without modification

Fig. 2

standard electric chair

with modification

### Construction

On two large pieces of cardboard draw templates (right and left) outlining the contour of the cushion to chair, slope of foot rest and horizontal extension of the foot rest. Mark the templates R and L (right and left) because both sides of the

chair differ in contour. The horizontal extension should be about four inches beyond the chair when the foot-rest is extended.

Cut the templates with scissors along the outline drawn and then hold them to the sides involved to test for snugness of fit.

Three quarters of an inch below the height of the cushion (Fig.3) mark one of the templates and from this point to the extension of the foot rest area draw a curve, beginning by continuing the cushion extension and then sloping rapidly downward.

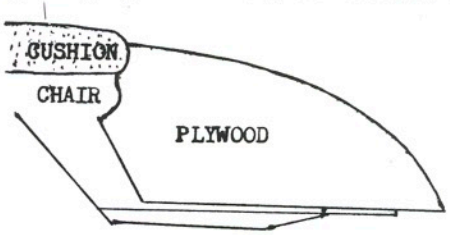



Fig. 3

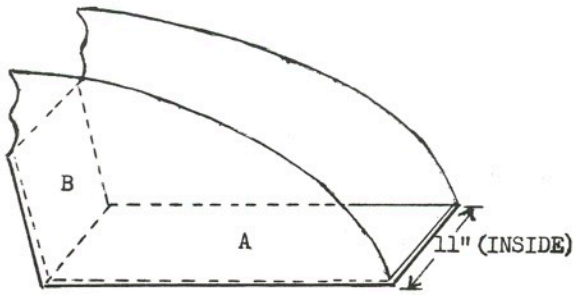



Fig. 4

The completed template is superimposed on the opposite one and both cut to the contour as drawn.

Place the templates on $\frac{3}{4}$" plywood, trace the outlines, and after having marked them R and L cut them out.

The two pieces of plywood now appear as in Fig 3. Ensure that the pieces are snug when checked in place on the chair. Some filing may be necessary in order to achieve a good fit in the cushion and chair area.

With the wooden sides in position at the widest part of the footrest, measure the inside dimensions (A and B in Fig 4) and cut $\frac{3}{4}$" plywood to fit.

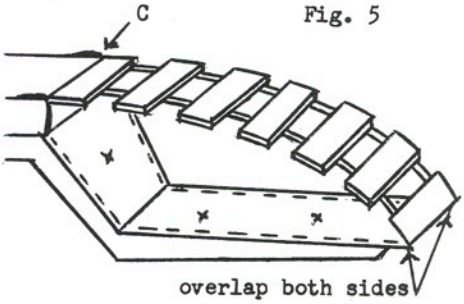



Fig. 5

Using pieces of <u>scrap wood</u> ($\frac{1}{2}$" thick and 15" long) fill the contour area, placing the slats $\frac{1}{2}$ inch apart and projecting approximately $1\frac{1}{2}$ inches over the edges. (Fig. 5)

Be sure to place the first slat at the cushion end of the contour (C) and proceed towards the foot-rest area.

When satisfied as to fit, all parts are nailed and glued together and permitted to set for at least 24 hours.

When the framework is dry and rigid, a piece of old broadloom is cut to fit the contour - just projecting over the sides. Using a good piece of leatherette, staple and glue it to the lower sides of the projecting slats. Complete the covering by nailing furniture tacks down the sides, neatly fold the corners of the leatherette to prevent unsightliness, and finally tack down the ends.

Drill three holes through the footrest and with 1" screws firmly fix the new attachment to the chair. Paint the sides to harmonize with the unit.

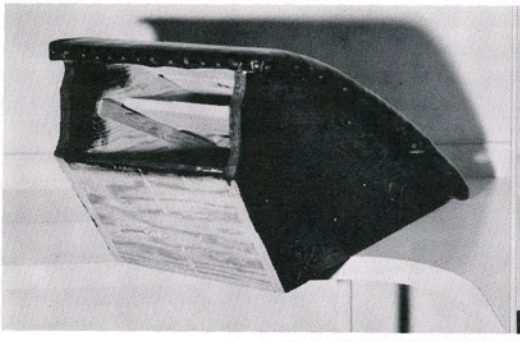


Fig. 6

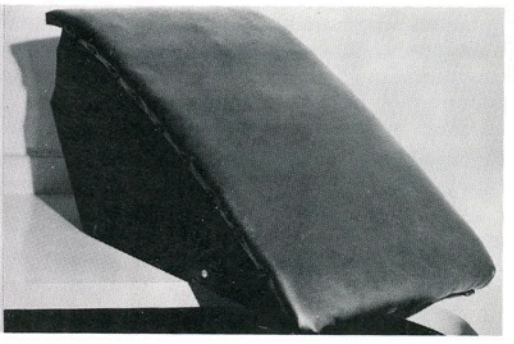


Fig. 7

Conclusion

The construction of a simple modification for the standard dental chair, which in effect converts it into a posture chair, has been described. The cost is minimal and the benefits well worth-while as will be evidenced by your patients' remarks regarding the comfort of the chair. (Fig. 7)

- - - - - - - - - - - - - - - - - -

LETTERS TO THE EDITOR

The RCDC Quarterly devotes this section to comments by readers on topics of current interest to Service dentistry. The editor reserves the right to edit all communications to fit available space. Printed communications do not necessarily reflect the opinion or official policy of the Royal Canadian Dental Corps.

Improving A Base Preventive Dentistry Programme

To the Editor:

For several years, in common with the profession in general, our Corps has stressed prevention of dental disease. While it is obvious that interest varies from member to member, the fact remains that the RCDC has a considerable body of highly trained and capable personnel working in the preventive field. It is surprising, therefore, that our years of effort do not show more obvious results although the benefits have undoubtedly been great. The feeling of partial failure has been brought to mind by the results of a modest but continuing local dental health programme and observations of the "average" patient.

What obvious result should be expected? To me, the idea that dental health is a vital, necessary and possible objective should now be known to many of the longer term military personnel, and should be an integral part of the training programme from recruit to senior officer. Gradually, I have come to realize that this is not so. Very often one is still confronted by the old hand who "never heard that before", whether we are talking about diseased tissue under unsatisfactory dentures, oral hygiene techniques, prevention, example through leadership, or individual responsibility for collective military dental health.

The reasons for this are many and some lie in our own failures. This letter offers a few suggestions and comments that may be helpful to those who feel that a preventive programme is an important responsibility of the RCDC.

Recruit training centres offer a challenge for obvious reasons. "Let's start them off right", is the plan. Units usually co-operate. I know of one using unit funds to provide each recruit with a recommended brush in a box with a tube of paste. This same brush, or at least its close relative with nylon bristles (hard and medium) is

available in the local MLS outlets (68¢) and these brushes are in the MLS catalogue. Arrangements can be made for local canteens to buy specific types of brushes but we have to see that there is a demand for them. The monstrous curved head brushes are also available (59¢ and 39¢) and at these lower prices we have to educate our patients to demand the better product and pay for the privilege. The only other solution may be to find some way of having MLS or CANEX stock a recommended brush as a subsidized or non-profit item. We should do something now that the last of the notorious "issue brushes" have gone from the supply chain.

In our program just before recruit training starts, or early in the programme, the local clinic staff present a lecture and demonstration to each new platoon. Two succeeding 50 minute periods are utilized. This is too little time to brain-wash but it is just enough to convince the few partially motivated individuals to practise personal oral physiotherapy. Having had the proper brush issued to them and having replacements available locally makes the lecture and demonstration just a little more meaningful. This is the brush required for the technique taught, and it is of course the brush used in the demonstration.

These two steps are a good start towards a continuous programme but unfortunately it usually stops here for a variety of reasons. The only contact the recruit now has with dentistry, other than his own toothbrush, is his prophylaxis and fluoride application appointment with the therapist and the occasional other visit to the clinic, usually for emergency treatment. Part of the reason for this is that the average instructor in the Forces has no interest whatever in dental health other than when it is forced on him. An invitation to just one recruit graduation dinner is enough to convince the dentist of this fact. As the beer flows more freely so do the "words of wisdom". They are startling and disheartening for anyone interested in the prevention of dental disease.

If only training authorities required a monthly report on dental preventive programmes listing for instance: the number of toothbrushing sessions following meals, the number of men carrying brushes to a field exercise, the number of corporals encouraging proper oral hygiene habits, the number of officers cleaning their mouths after coffee break in the mess; then perhaps our problem would be solved. We could no longer say that if the mouths were as well cared for as personal weapons and barrack blocks we wouldn't have a treatment problem; or that if the teeth were brushed as much as the boots we could get on with the task of catching up on the backlog of dental disease.

I used to be pleased when a unit senior officer showed an interest in his men being dentally fit. Experience has shown though that often all this means is having "work done", that is, dentures, fillings and extractions. Their part in prevention is not appreciated and they feel that their duty is done when the unit has been paraded past a dental officer for a cursory check with a tongue depressor. How often does a CO's parade take priority over any dental appointment on your base? Just try and find out who it was who should have seen that the patient presented, and you will get some idea of how many people from the very junior to the most senior, that we have to convince.

During this same "easily pleased" period I was involved with dental health lectures to relatively large numbers of people. Large numbers in the audience seemed synonymous with success. Such lectures probably do some good depending upon the training aids available and the ability of the speaker but this "one shot" method does not appear to have a great or lasting effect. For the listener, it can be a dull and not very enlightening experience. My attention has always been drawn to the fact that the percentage of each group attending is inversely proportional to their rank. This is usually a case of a bad example being set by superiors who rarely think of dental health and almost never of prevention of dental disease. Diplomacy may be part of the answer. We have to convince the officers and NCOs by reason. We need all the encouragement from higher authority and from non-dental channels that we can muster.

Sometimes reason is hard to apply. We are just a little different as our message does not affect the immediate efficiency of the particular group in question. This

makes the convincing all the harder. We are different too in that the patient's lack of appreciation of his own responsibility for proper oral care shows up in his attitude to the dental staff. If he were going to a medical officer or to a hospital he would probably have a bath or wash his hands or put on clean underwear. This is not so when going to the dentist. For some reason we are expected to lean on a dandruff-laden shoulder, push through an air of "Junglemouth" and have the honour of scraping through layers of hard and soft debris to find the possible source of pain. If we object and become a little annoyed the patient goes back to his unit and complains about the "blast he got from that - - - of a dentist". This is hard to accept from men who get real blasts for far less important things than filthy mouths. When pain results from this patient neglect we are blamed. Thus the approach to our patients, in and out of the chair, must vary according to the patient and to the circumstances of our meeting if any progress is to be made.

Progress in dental health education is slow and time consuming. This year I have approached smaller groups and we have "gone to them" with our message. These smaller groups respond well, probably because they are comfortable in familiar surroundings and the senior people are usually present. Further, they appreciate interest being shown in their particular tasks and they co-operate most willingly. This method causes the least disruption of their routine. When speaking to other than recruits we have found that talks can be broadened in scope to include matters of interest concerning dentistry in general. Prevention can be discussed not only from a personal standpoint but from that of their dependents. When a saving of real dollars and cents can be demonstrated, interest jumps. Approaching patients through their dependents is one way of generating real interest, and a flow of interested comment and keen questions can result. These questions are difficult to answer at times because they tend to involve particular procedures by particular dentists. However, they must be answered as we represent not only the RCDC but the dental profession. Talks such as these can lead to wider horizons with listeners occasionally extending invitations to address outside clubs, home and school groups and so on.

Any talk should be as interesting and as well presented as possible, making use of movies, colour slides, models, training aids and pamphlets to the maximum degree available. It is unfortunate that we do not have a library of such items obtainable at short notice, perhaps from Dental Unit level at the very least. Without such aids a discourse on dental health can be dull. Opportunities to speak to groups come on short notice and at odd times which vary from unit to unit and section to section even within one Base. Unless we have our material at hand the opportunity is missed.

The lectures and demonstrations require a more intimate area for presentation than a theatre, drill hall or hangar, and they require more than one person to make the presentation. Not only do our therapists make better contact with part of the audience, but they also provide a different focus for the group and overcome any tendency to boredom.

Most people are familiar with 35mm colour slides but their reaction to such slides on dental subjects is almost one of wonder. I have been fortunate in acquiring over the years slides of toothbrushes and enlargements of their bristles, normal and diseased gingival tissues, clean and dirty mouths, rampant caries, as well as roentgenograms to illustrate various points. Any success I may have had with preventive lectures is largely due to these slides. Photographs of a wall plaque showing the RCDC Crest and a photograph of the RCDC School at Borden open the series. Such a series, possibly prepared by The School, would be a valuable aid to lecturers, especially if their emphasis were Canadian and in some way could feature Canadian Service situations and personnel.

Finally, the Corps could consider the educational possibilities offered by our many waiting rooms. Rather than a few tattered juvenile posters secured to the wall by cellulose tape, would not framed attractive productions directed to the military and adult patient be preferable? A circulating library of these items would carry our message to the patient in a painless way and their rotation would prevent over-familiarity. Each waiting room in the Corps could then become a small but important centre of preventive knowledge.

LCOL JM Smith, CD, DDS,
London, Ontario.

# The RCDC News

SIXTH ANNUAL RCDC BONSPIEL

The Sixth Annual RCDC Bonspiel was again hosted by the RCDC School. 32 rinks representing every RCDC unit in Canada participated in the Bonspiel.

List of winners and runners-up:

| Winner "A" Event | Winner "B" Event | Winner "C" Event |
|---|---|---|
| Skip - MWO JA Fraser | Skip - CPL JE Clint | Skip - LT TM Jackson |
| Vice - WO RJ Goodwin | Vice - MWO EE Mazerall | Vice - COL CM Cornish |
| 2nd - MAJ GIJ Bisaillon | 2nd - MWO JH Sadler | 2nd - LT McEwen |
| Lead - LCOL GE Windsor | Lead - SGT B Vandervaart | Lead - SGT JG Moore |
| **Runner-up "A" Event** | **Runner-up "B" Event** | **Runner-up "C" Event** |
| Skip - SGT RJJ Tremblay | Skip - CAPT CW Kearns | Skip - LCOL PS Sills |
| Vice - MWO (AF)(W) PE Savage | Vice - LCOL WH Carter | Vice - CAPT DD Robertson |
| 2nd - MAJ JF Begin | 2nd - CAPT AM Gareau | 2nd - CWO TL Batten |
| Lead - CAPT JM Steadman | Lead - WO PD Peterson | Lead - CPL LR Hatcher |

It is regretted that group photographs of winning rinks were not suitable for publication.

On Saturday evening, 17 February, 147 Dental Corps personnel attended the Bonspiel dinner following which trophies and prizes were presented.

# Division News

Visits

The Director General of Dental Services made liaison visits to TCHQ and 14 Dent Unit 10-11 Apr, and to 15 and 12 Dent Units 22-26 Apr 68.

Col LG Craigie, LCOL WR Thompson and Maj CA Casterton visited 15 Unit, 12 Unit and the Units in Europe during this quarter to brief all personnel in career aspects involving promotion and trade advancement.

BGEN BP Kearney, Col LG Craigie and Col JW Turner represented the Corps at the closing of the Medical-Dental Officers' Mess at CFB Borden 18 Apr 1968.

Maj JVP Chatwin visited the Units in Europe 27 Jan-3 Feb to discuss the Corps Preventive Dentistry Program which commenced 1 Apr 68.

Sports

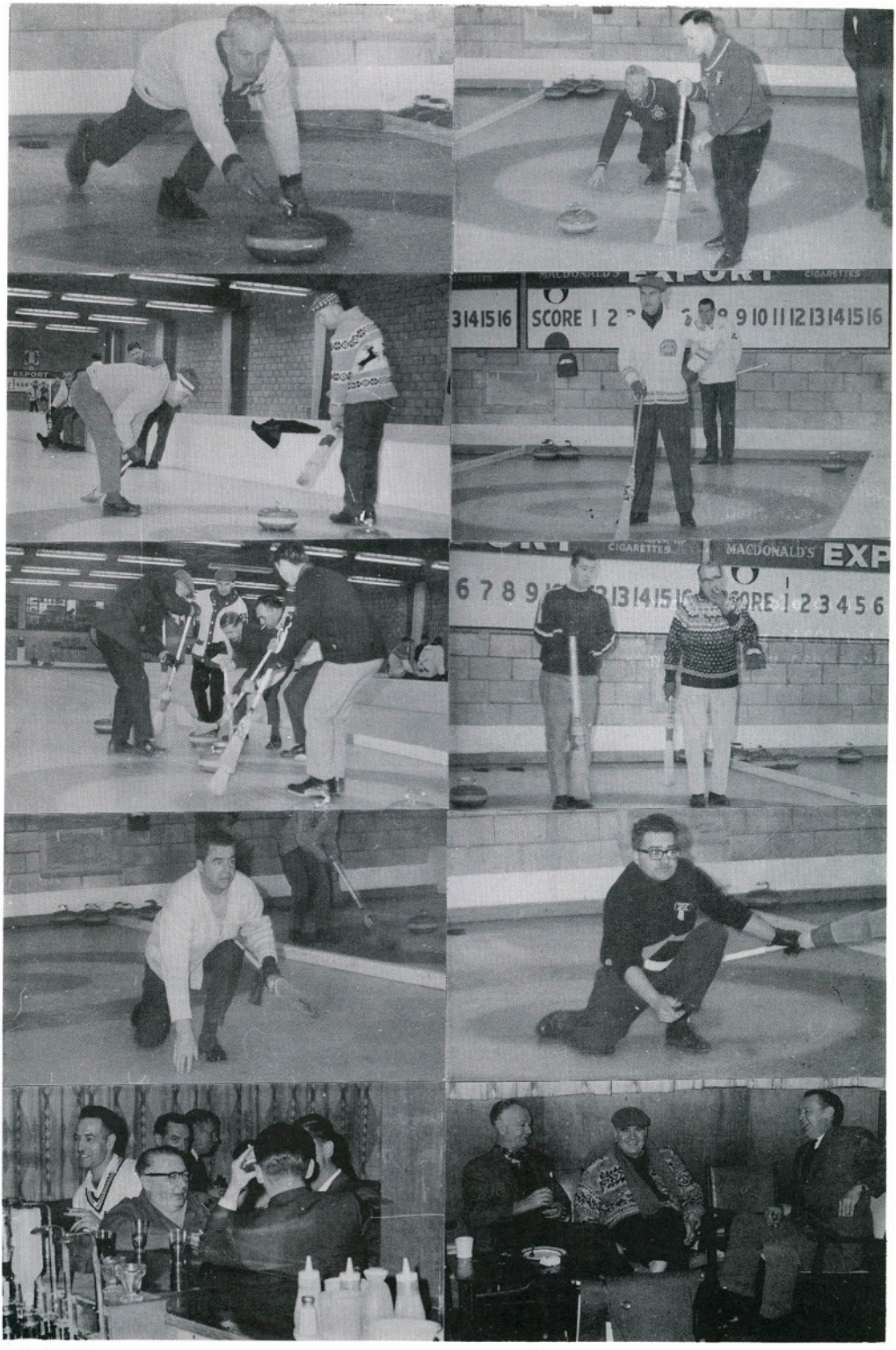
While success eluded both rinks from the Division at the RCDC Bonspiel, one consisting of WO Sullivan (skip), Sgt Shergold, Sgt Dumas and WO James fared very well in the CFHQ Recreational League. They were runners-up in both the "B" Division of the CFHQ Recreational League and the CFHQ Final Bonspiel.

# 1 Dent Unit

Meetings and Conferences

On 26 Feb 68, dental officers in the Ottawa area attended a lecture in the NDMC auditorium presented by Dr DL Anderson on the subject - "Oral Cytology".

On 31 Jan 68 Maj JJY Turcotte spoke to the Rideau District Dental Society in Perth. The subject of his presentation was "Cardiology and the Dentist".




SIXTH ANNUAL RCDC BONSPIEL - 1968

## 11 Dent Unit

Unit Bonspiel

The Second Annual 11 Dent Unit Bonspiel was held at the Griesbach Curling Club 24 Feb 68. A total of 45 curlers were in attendance from Cold Lake, Calgary, Penhold and Edmonton.

Winners of "A" Event
L to R - Sgt Walker (Skip), Cpl Ayerst, Cpl Peck and Cpl Schultz

Winners of "B" Event
L to R - LCOL Jackson, Maj Brogan, WO Shand and WO Neill (skip)

## 12 Dent Unit

Versatile Assistant

The RHC pipe band from CFB Gagetown was invited to perform in a Tattoo to be held in Jamaica 9-20 Mar 68. Due to an extreme shortage of pipers Cpl Roy was loaned to the band for this period. Although it was a good trip and he returned with a good tan, Cpl Roy is completely convinced that his transfer to the RCDC was a very wise move.

Sports

Maj TD Cobb and Capt WJ Percival (skip and mate) won the "C" Event in a "Nighthawk Bonspiel", held from 2100 hrs 2 Feb - 0900 hrs 3 Feb at CFB Gagetown.

Capt ED Cragg was selected for the Maritime Command Badminton Team and attended the finals in Edmonton 23-25 Jan 68.

## 13 Dent Unit

Retirements

Sgt "Joe" Gravelle has again retired from service with the RCDC. Shortly after retiring from the CA(R) in 1961 he joined the Reserves and was called out on continuous duty with the RCDC. He was employed at Downsview as a dental technician until 31 Mar 68 when his call-out ceased. Dental personnel at Downsview presented Joe with a gift and wished him well on his return to civilian life.

Major DJ Carmichael is leaving the Corps after 17 years of service which took him to Europe, the Middle East, as well as postings from coast to coast across Canada. Dave served with the RCAF as a pilot during World War II, but is best remembered for his big Stetson which was always in evidence at Corps sports functions. The family will move to Winnipeg where he has taken a position with the Dental Faculty at the University of Manitoba. The Corps wishes Dave the best of luck in his new career.

## 14 Dent Unit

Meetings and Conferences

LCOL Anglin, Maj Begin, Capts Steadman and Poy attended the Manitoba Dental Association Convention 19-20 Jan 68. Dr FM Lott, ex DGDS of the Canadian Dental Corps 1939-45, of Los Angeles, California was a guest clinician. His subject was "Flange Techniques in Complete Dentures". Dr WP Muncie, President of the Canadian Dental Association was guest speaker at the Saturday luncheon. His subject was "Denticare under Professional Control".

Col SN Bhaskar, Chief, Department of Dental and Oral Pathology, Walter Reed Army Medical Centre Washington, DC, spoke to the Winnipeg Dental Society 19 Feb 68 on "Oral Diagnosis".

Special Events

Dental personnel in the Winnipeg area spent an afternoon and evening of curling 16 Mar 68 at the CFB Winnipeg Curling Club. The presentation of prizes followed the curling and Capt and Mrs Fortier were honoured at the social gathering prior to their departure on posting to Germany.

## 15 Dent Unit

Courses

Capt JS Dion safely completed the Basic Para Course at Rivers, Manitoba, in Jan 68 and proudly wears his wings with the R22eR in Quebec City.

Sharp-Shooting Dental Officer

LCOL JC Brick was selected as a member of the Dominion of Canada Rifle Association Team which represented Canada in the Commonwealth Rifle Match held in Melbourne, Australia, on 12 Mar 68. Preliminary matches were held in Wellington, N.Z. and in Sydney, New South Wales. It is hoped that a more detailed account of this interesting safari may be available for publication in a subsequent issue of the Quarterly.

Retirement

Canadian Forces Headquarters has announced the retirement of LCOL WH Carter after 24 years of service. Bill served with the RCAF as a pilot during World War II and following the War obtained his DDS from McGill University. He will long be remembered for his prowess in RCDC golf and curling events. The Corps wishes Bill and his family good fortune on civvy street.

Training

Dent 33 - Dental Assistant 721 PL 3 - 26 Feb-19 Apr 68

Seated L to R - CWO TL Batten; Maj SW Muller; Col GR Covey; Sgt GN Fathers
Middle row L to R - Pte (AF)(W) IJ Moore; Cpl (AF)(W) BA Gilkes; Pte (AF)(W) BM McCaffery BM; Cpl (AF)(W) MM Daniels; Ptes (AF)(W) ML Marcoux, JE Brayton, PA Graham, JG Parker
Back row L to R - Ptes CH Forsythe, JG Allain; (AF)(W) MB Bond, (N)(W) TD Manuge, (AF)(W) MF Roseberry, CA Bondy; Cpls LA Overbye, A Busse

Dent 31 - Dental Laboratory Technician 723 PL 5 - 27 Mar-24 May 68

Seated L to R - WO J Hossdorf; LCOL PS Sills; Col GR Covey; LCOL AG Andrews; Capt DD Robertson; Sgt KS Rothwell
Middle row L to R - Cpls JR Ritchie, GN Challenger, BF Hannah, JD Cormie, PD Whynott
Back row L to R - Cpl CSB Heather, Cpl CS Brown, Cpl WJ Mitrikas, Cpl JM White, Cpl RS Black

## Academy of Dentistry Toronto - Visits The RCDC School

On 21 Mar 68, the RCDC School hosted 40 members of the Academy of Dentistry, Toronto. The Commandant welcomed the distinguished group to the School, outlined the basic organization and function of the RCDC in the Canadian Forces and made specific reference to the missions of the RCDC(S) to the Corps. Major SW Muller presented a resume of the Preventive Dentistry Programme to be initiated in the RCDC and the role of dental auxiliaries in Service dentistry. The guests were then conducted on a tour of the School. The tour stressed several displays and practical demonstrations of the capabilities and functions of dental auxiliaries.

After lunch, a series of lectures were presented by LCOL AG Andrews, MAJ JN Wright, MAJ AG Taylor, and LCOL PS Sills.

The day's activities were climaxed by a fellowship hour and dinner with 55 people in attendance. During dinner, Dr GR Marshall expressed the Academy members' appreciation for the programme and made a presentation to the RCDC School.

L to R - Maj AG Taylor, LCOL PS Sills, Dr Geoff Smith, Maj JN Wright, Dr Gordon M Marshall, Col GR Covey, LCOL AG Andrews, Dr JT Hing, Maj SW Muller, Dr MA Kamienski

## Training Assistance

On 19 Jan, Dr.James Purves, President, Board of Directors of Royal College of Surgeons of Ontario was a guest lecturer for the Officers Clinical Course.

On 5 Feb, Dr HA Hunter, Professor of Oral Pathology at the Faculty of Dentistry U of T, spoke to the Officers Clinical Course and staff on "Oral Cytology"; and on 9 Feb, Dr JS Speck, Associate Professor of Periodontics at the Faculty of Dentistry U of T presented a lecture and practical demonstration on "Occlusion".

## Conferences and Meetings

In the series of staff professional meetings held at the School, the following papers have been presented:

| | |
|---|---|
| The Mechanism of Blood Clotting | - Capt N Misura |
| Occlusion | - Capt G Pinsonneault |
| Therapeutic Application of Bite Planes | - Maj JH Marion |
| Case Presentation of Calcified Submaxillary Gland | - Capt HJ Nadeau |

## Sports

On 24 Feb, the CFMS held their first Canada-wide Bonspiel at Borden. In order to complete 32 rinks, the RCDC School "obliged" with a team consisting of Cpl Clint (skip), MWO Mazerall, CWO Batten and Sgt Vandervaart. They won "B" Event and the Col Norm McNally Trophy will reside in the RCDC(S) trophy case for the year.

## 1 Dent Eqpt Dep

Training

Special Conversion Course Dental Storeman Group 3 - 8 Jan-28 Mar 68

Back row L to R
MWO JW Hutchinson
CWO EC Carpenter

Front row L to R
(course members)
WO AL Strub
WO EA Jermain
WO AH Green
SGT CE Schmelzle

Sports

The Annual 1 DED - 1 CMED Curling Challenge was held on 19 Mar 68. No 1 CMED managed to win over the Depot by two points.

## 35 Fd Dent Unit

Sports

The RCDC (Europe) Bonspiel was held in Zweibrucken 16 Feb 68 when curlers of 4 Field Dental Coy led by LCOL Richardson visited the Air Division for a match against personnel of 35 Field Dental Unit. The match was held in the Curling Club at 3 Wing and 4 Field emerged victorious. Thus, the Horse's Head Trophy now decorates LCOL Richardson's office and the trophy which represents the north end of a horse going south is carefully hidden in LCOL Protheroe's office.

LCOL Protheroe presenting the RCDC (Europe) Curling Trophy to LCOL Richardson and the curlers of No 4 Fd Dent Coy.

Conferences and Meetings

LCOL DH Protheroe visited 2nd US General Hospital at Landstuhl on 7 Mar to present a paper entitled "The use of Auxiliary Dental Personnel in the RCDC".

New Clinics

A new RCDC clinic staffed by Capt RM MacDonald and Sgt JF Giroux was opened in Chievre, Belgium on 15 Feb 68 to provide dental treatment for Canadian servicemen and their dependents stationed at SHAPE HQ.

Another new dental clinic should open by early May at HQ Allied Air Forces Central Europe in Brunssum, Holland staffed by Capt CJ Boston and Sgt JR Fathers.

## 4 Fd Dent Coy

Conferences and Meetings

Professional study group meetings were held on 24 Jan 68 and 28 Feb 68 with the following presentations:

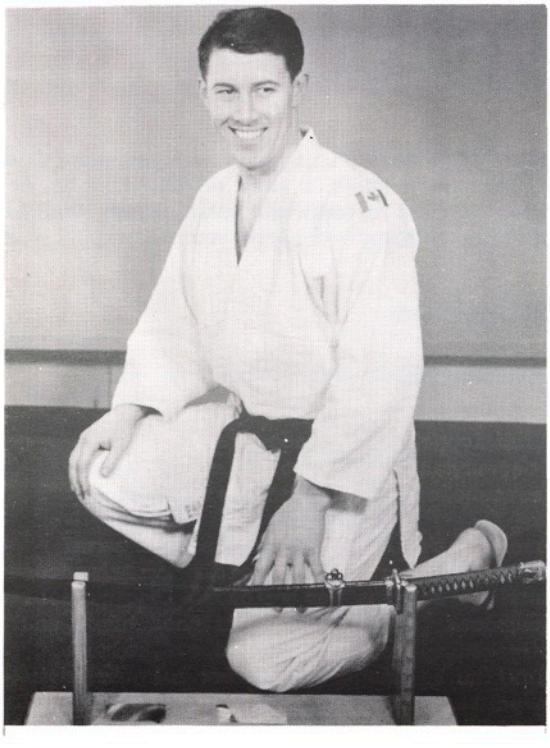
a. Maj Kessel RADC - "Cysts and Bone Defects" - a summary of interesting case histories, many of which were referrals from 4 Fd Dent Coy.

b. Capt Griesbach - "With Gun and Camera through the Oral Cavity" - a review of apthous and herpetic lesions.

c. Maj Deyette - "Dowel Crowns - Using Direct Patterns" - a table clinic.

d. LCOL Richardson - "Treatment Planning - an Aid in Assessing Difficult Problems" - a demonstration of a technique of mounting study casts on an adjustable articulator for occlusal analysis.

Judo Champion



Congratulations to Capt Swanzey who won the British Army Light-Heavyweight Judo Championship in Colchester, England, on 29 and 30 Mar 68.

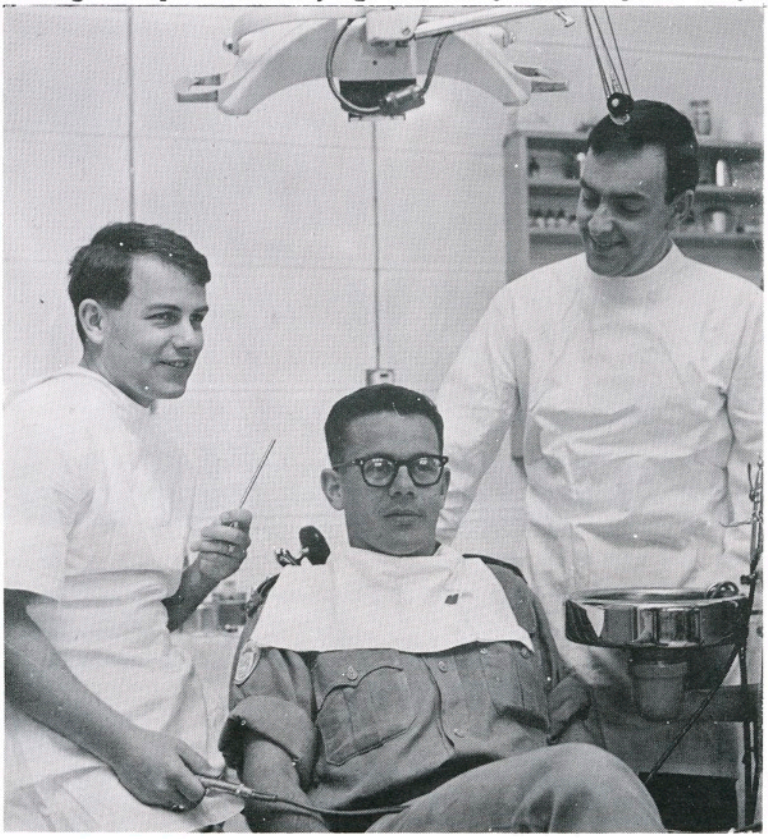
A personal message from General Sir John Hackett to LCOL Richardson read - "Please convey my warm congratulations to Captain AN Swanzey on winning the Light-Heavyweight Event of the Army Judo Individual Championships at Aldershot on 29/30 Mar 68."

Capt Swanzey with his trophy

## Dent Det Cyprus

Rotation

During the month of March, the Cyprus Detachment was rotated, the new one consisting of Capt HJ Nadeau, Sgt CBS Forsythe and Cpl RW Danyluck.



Capt JG Thompson (left), the patient - Capt J Fuller looking well taken care of, and Capt HJ Nadeau in his new environment.

Skiing in Cyprus

Believe it or not, members of the RCDC Detachment in Cyprus enjoyed some local skiing during the month of February. Cpl Beauchamp spent a week of UN leave in the ski area - Mt Troodos. Unfortunately after a one and one-half hour skiing venture in the same area, Capt Thompson ended up nursing a sprained right ankle.

## Professional Training

| | | | | | |
|---|---|---|---|---|---|
| **ENT Air Force Base - Colorado Springs, Colorado, USA** | | | | | |
| Major | BA | Gaudet | - | Oral Surgery | - 1-12 Apr 68 |
| **US Naval Dental School - Bethesda, Maryland, USA** | | | | | |
| Major | JF | Begin | - | Periodontics | - 22 Apr-7 Jun 68 |
| Capt | DG | Jones | - | Periodontics | - 22-26 Apr 68 |
| Capt | JAA | Boucher | - | Short Specialty Course in Dentistry | - 29 Apr-3 May 68 |
| **University of Michigan, Ann Arbour, Michigan, USA** | | | | | |
| Capt | FC | Arpin | - | Crown & Bridge Prosthesis | - 4-15 Mar 68 |
| Capt | EF | Foley | - | Complete Denture Prosthesis | - 15-26 Apr 68 |
| Capt | JWC | Walls | - | Periodontics | - 1-12 Apr 68 |
| **Doctor's Hospital, Toronto, Ont** | | | | | |
| Major | JF | Eadon | - | Residency Training in Oral Surgery | - 18 Mar-10 May 68 |

## Training

RCDC School - Canadian Forces Base Borden

Dental Assistant 721 Level 3 Course - 26 Feb-19 Apr 68
Cpls A Busse, LA Overbye; Ptes JG Allain, CH Forsythe, Cpls (AF)(W) MM Daniels, BA Gilkes, Ptes (AF)(W) MB Bond, CA Bondy, JE Brayton, PA Graham, ML Marcoux, BM McCaffery, IJ Moore, JG Parker, MF Roseberry, Pte (N)(W) TD Manuge

Dental Therapist 725 Level 8 - 5 Feb-31 May 68
MWOs AS Field, SL MacLean; WO WA Jackson

Dental Laboratory Technician 723 Level 5 - 27 Mar-24 May 68
Cpls RS Black, LS Brown, GN Challenger, JD Cormie, BF Hannah, CSB Heather, JR Ritchie, WJ Mitrikas, JM White, PD Whynott

Ticonium Company, Albany, NY, USA

Ticonium Equipment Course - 11-15 Mar 68
Cpls PE Harkin, EJ Schultz, JLA Violette

## Welcome to the Corps

A cordial welcome is extended to the following personnel who have recently joined the Corps:

Cpl LJ Kallan, Cpl (AF)(W) ME Mahlitz; Pte (AF)(W) MHM Levert, Pte CH Forsythe

## Promotions

To Major - GW Hill, PR McQueen
To CWO - LA Lawson
To WO - FJ Reid
To Sgt - WB Looker, LI MacLean, RC Wormington
To Cpl - JMM Arbour, GH Gallagher

## Retirements and Releases

LCOL WH Carter; Maj DR O'Hara; Capts JLC Giguere, JEG Brissette, IM Hamilton, Dr HE Bing; Sgts JA Gravelle, CA Chartier; Pte BLJ Chenail, Pte (N)(W) SM Janz

## Vital Statistics

Marriage

Miss SJ Cormier (Dent Nurse) to Mr DC Morrison

Births

Son - Sgt & Mrs H Marckwort

Daughter - Maj & Mrs BA Gaudet (correction from TC Gaudet in last issue with apologies); Capt & Mrs JPJ Laporte, Capt & Mrs WA Gray, Capt & Mrs EF Foley; Sgt & Mrs LI MacLean; Pte & Mrs EAJ Morin

- - - - - - - - - - - - - - - - -

NOTICE

During the recent RCDC Bonspiel in Camp Borden a Zippo Lighter was found in the washroom of the Hennesy Block. The inscription on the lighter reads "Presented by 3 Clinic CFB Petawawa". The owner may claim same by writing Sgt Tremblay at No 2 Dental Clinic, CFB Winnipeg, Westwin, Man.