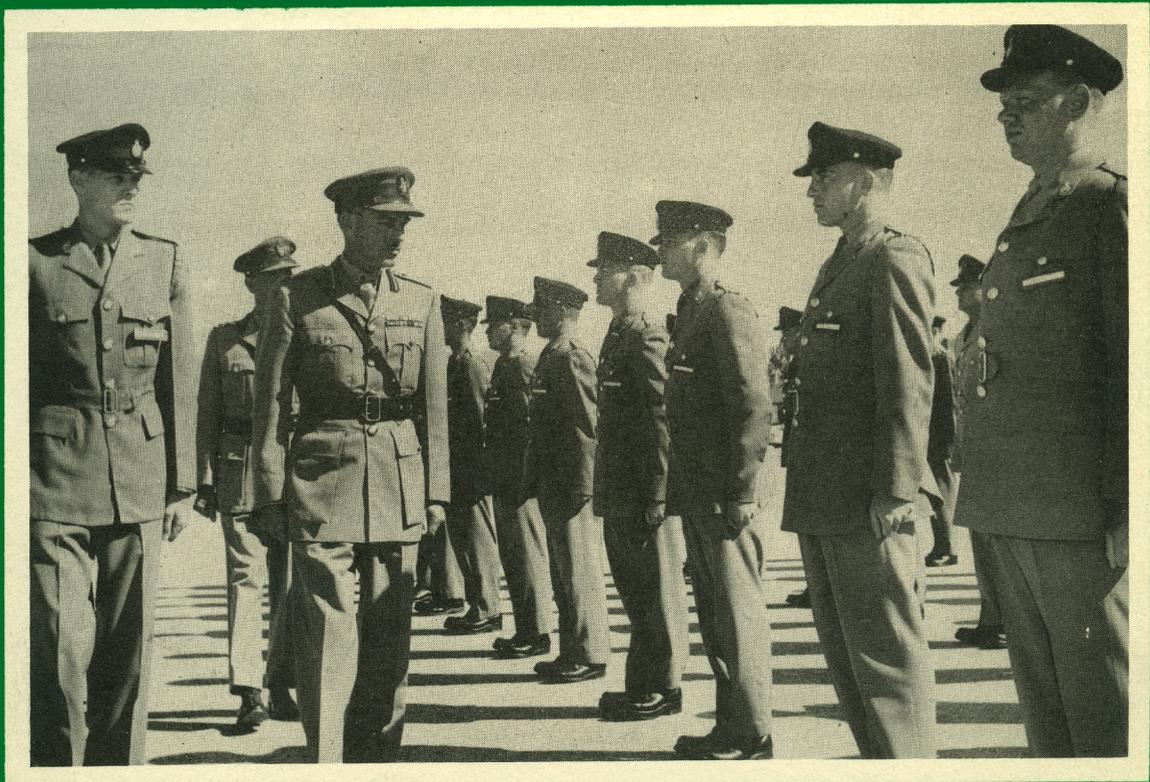


*The*  
**ROYAL CANADIAN  
DENTAL CORPS**  
*Quarterly*



VOLUME 3 NUMBER 3

OCTOBER 1962

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THE RCDC QUARTERLY

Published by authority of Brigadier KM Baird, Director  
General of Dental Services for the Canadian Forces

Editorial Board: Col GB Shillington  
Lt Col GR Covey  
Lt Col DH Hillier

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E D I T O R I A L

The Royal Canadian Dental Corps salutes its sister organization, the United States Naval Dental Corps on the occasion of its fifteenth anniversary celebrated on the 22nd of August of this year. While this date preceded by only a few years that of the founding of the Canadian Army Dental Corps, as it was then known, the vast difference in population of the two countries has permitted, and indeed made necessary, a much larger and more complex body to attend to the dental requirements of the US Navy.

This vast organization might well have ignored its smaller sister to the north but such, indeed, has not been the case and willing assistance has been offered in a variety of methods. These include the provision of courses of varying duration as part of the education of future instructors at The RCDC School; short refresher courses for clinically employed officers; assistance in the inauguration of new courses by the provision of instructors; and, lately, the enrolment of officers in the extension education program conducted by the US Naval Dental School.

Royal Canadian Dental Corps officers have been privileged to enjoy the association of US Naval Dental Corps officers attending clinical courses at The RCDC School while the officer exchange program between the respective Schools is now in its second year and, it is believed, to the mutual benefit of both organizations.

The RCDC extends best wishes to the USNDC for future success and prosperity and looks forward with confidence to a continuation of the cordial relationship that has developed over the years between the two Corps.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

SUMMER TRAINING - SUBSIDIZED DENTAL UNDERGRADUATES

Major DH Protheroe, DFC, CD, DDS, MPH

During the months of July and August for the past fourteen years, the staff of The RCDC School has been engaged in preparing subsidized dental undergraduates for service as dental officers in the Corps. The importance of this activity is evident when it is considered that more than 75 percent of the present dental officers entered the Corps via the subsidization route. Many of these officers look back on the summers they spent as members of the Regular Officers' Training Plan, 21-Month Subsidization Plan or Canadian Officers' Training Corps as among the highlights of their service careers. The 1962 summer training programme, which marked the first time that candidates in the new Dental Officers' Subsidization Plan had participated, has only recently been completed and the time seems opportune to outline the summer training given subsidized dental undergraduates.

The military training programme for dental undergraduates enrolled in the Dental Officers' Subsidization Plan is undertaken in three phases, each of which contains a theoretical portion, taken during the academic year, and a practical portion, taken during the summer.

FIRST PRACTICAL PHASE

The first practical phase is conducted at The Royal Canadian School of Infantry, Camp Borden. Candidates receive junior officer training and instruction in the basic skills of the Army. Subjects included in the syllabus are: weapons, fieldcraft, field engineering, first aid, hygiene and sanitation, leadership, man-management, map using, military law, NBCW, physical training, signal communications, staff duties in the field, military writing and tactics. Although this appears to be a tough schedule, much of the training is conducted out of doors to develop physical fitness and plenty of time is left for recreation.

Students who have undergone this training are undoubtedly the best qualified to describe it. The following is a description of first phase activities by four third phase cadets from the University of Toronto: (1)

"The summer is filled with a harmonious blend of basic training, recreation and social activities. Basic training, although at times physically fatiguing, leaves the cadet with a host of memorable experiences and numerous new friendships. Considerable time is devoted to basic drill during which the cadet progresses from the simple movements he learned in the first theoretical phase to the more complicated ones of the practical phase. A thorough and interesting course on weapons is given which includes the C1 and C2 rifles, sub-machine carbine, pistol, rocket launcher and hand grenades. The cadets first learn the theory and safety features of these weapons before they are allowed to fire them under careful supervision. Perhaps the most interesting aspect of the summer is the fieldcraft training. Here the cadets become familiar with living in the field. Throughout basic training each cadet assumes various commands and learns to accept responsibility and show his leadership qualities. Recreational facilities are abundant at Camp Borden. Forty minutes a day are set aside for physical training which includes calisthenics and track and field for those interested. There are also facilities for tennis, golf, billiards, ping pong, baseball and swimming. Social facilities are never wasted on the cadet at the Infantry School and the highlight of the summer social life is the Cadet Ball. The colour and pageantry associated with this affair is sufficient to make any cadet proud to be a member of the Armed Forces and in particular the Dental Corps."

This year, for the first time, all of the RCDC cadets attained marksman or 1st class shot with the FN C1 rifle and considering that many had never fired a rifle before, this was a record of which they were justly proud.

The photographs below depict the type of training that the first phase cadets receive. It is evident that they are fit and morale is high.



Onlooker: O/Cdt EF Foley, (Dalhousie)  
Map User: O/Cdt JO Strom, (Alberta)  
Compass: O/Cdt GDV Dippel, (McGill)



Firer: O/Cdt GHJC Nadeau, (Montreal)  
AI: WO2 Brown, Cdn Gds  
Left: O/Cdt JAA Boucher, (Montreal)  
Right: O/Cdt BB Berezan, (Alberta)

#### SECOND PRACTICAL PHASE

In line with the tri-service role of the RCDC, the second practical phase training is intended to provide cadets with a basic knowledge of the RCN and RCAF as well as special to Corps aspects of the RCDC. The training is conducted in three stages: Stage 1 with the RCN at HMCS Cornwallis, N.S. and HMCS Stadacona, Halifax; Stage 2 with the RCAF at RCAF Station Centralia, Ont; and Stage 3 at The RCDC School, Camp Borden.

This year Stage 1 began on 1 Jun at the Leadership School, HMCS Cornwallis. Lectures were given in RCN administration, history, customs, dress, law, training, ships and the role of the RCN. Social life included a mess dinner on 11 Jun and on 13 Jun Lt Col NA Butcher, with the help of the officers of his clinic, arranged a lobster and beer party as a finale to a day of boatwork and recreation at the RCN beach at Raven Haven. As a parting gesture to Cornwallis, the cadets "kindly" coloured the officers' swimming pool a delicate shade of pink and launched a 23-foot whaler into it.

On 17 Jun the cadets arrived at Stadacona for a one-week visit. During this period they were given a first-hand look at the naval installations and ships as well as a few lectures. Some of the highlights were: a day at sea aboard HMCS Mallard and HMCS Cormorant; a visit to HMCS Shearwater at Dartmouth for a fly past and rescue drill demonstration; and a tour to Peggy's Cove, a typical east coast fishing village.

The second stage of Phase 2 commenced on 24 Jun at RCAF Station Centralia following a flight from HMCS Shearwater in an RCAF North Star aircraft. An orientation course was given by the RCAF similar to that provided by the RCN at HMCS Cornwallis. In addition, there were recreational afternoons and a tour to Grand Bend, a trip to Stratford to see a

production of "Taming of the Shrew" at the Shakespearian theatre, as well as an industrial tour of Labatt's Brewery in London.

The third stage which is conducted at The RCDC School commenced on 7 Jul for a five-week period. The purpose of the course at The RCDC School is to provide a basic knowledge of the Corps. The subjects covered are: organization and administration of the RCDC; documentation and treatment policy; medico-legal responsibilities; equipment maintenance; clinical and laboratory procedures; national survival training; and recreation. More than half of the course is spent learning and practising clinical and laboratory procedures which stand the cadet in good stead for his return to university and third year dentistry. The photographs below show this year's second phase cadets at work in the laboratory.



L to R: O/Cdt K Tangen, O/Cdt RWC Adams, O/Cdt RW Chernesky, O/Cdt TC Tervit



L to R: O/Cdt H Griesbach, O/Cdt RH Crowson, O/Cdt JA Nattress, O/Cdt JPJ Laporte  
Standing L to R: WO2 EB Morse, O/Cdt CJM Boston  
O/Cdt RWC Adams, O/Cdt JWC Walls  
O/Cdt TC Tervit, O/Cdt RW Chernesky  
O/Cdt K Tangen

### THIRD PRACTICAL PHASE

Most cadets who have completed the three practical phases of undergraduate training seem to agree that the third practical phase at The RCDC School is the most enjoyable and rewarding of all. The purpose of third phase training is to give cadets specialized training which will enable them to perform their duties efficiently when appointed as dental officers. Briefly, this ten-week training period includes six weeks of practical clinical duties, three weeks learning special to Corps subjects and one week of national survival training.

Again it seems appropriate for the sake of authenticity to quote the words of the 1962 cadets (1) themselves in describing third phase activities. "The cadet will find his third practical phase of training extensive and interesting. The first three weeks are spent in the dental clinic at The RCDC School in Camp Borden. The cadets are divided into pairs which are allotted an operating area and dental equipment. The members of each pair are designated dentist and dental assistant with these positions alternating every other day. As a result the cadet learns the role and responsibilities of assistants so that following graduation he can utilize them to better advantage. During each day four patients are treated by each group, two in

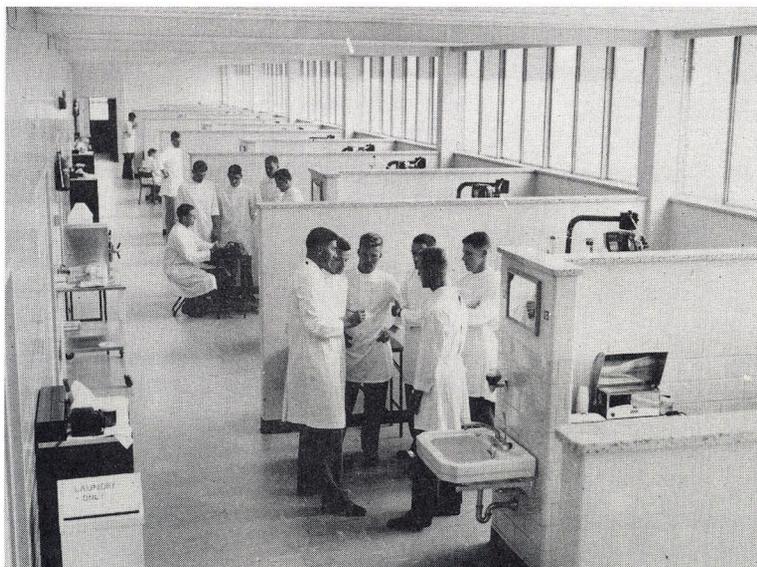
the morning and two in the afternoon. This number of patients per day increases the operating speed of the student who is accustomed to working on two patients a day at university. Furthermore, the RCDC is equipped with the most up-to-date dental equipment including airtors, high vacuum aspirators and x-ray machines to ensure the best diagnosis and treatment for the patient.

The next four weeks are spent taking lectures in national survival training and RCDC administration. This is followed by a series of dental lectures encompassing the fields of operative dentistry, crown and bridge, complete denture prosthesis, surgery, radiology and endodontics. These lectures are given by well-qualified graduates as at university but the atmosphere is more relaxed and similar to post-graduate study. Each lecture series is given by an officer with advanced training in that field of dentistry so that the information is well organized and presented in an interesting manner.

The social and sports activities are as exhaustive as the more serious side of the third practical phase. If on sports afternoon the cadet is not playing organized baseball or volleyball with the officers and sergeants, he might be found relaxed in the sun at Wasaga Beach. In addition, there are two golf courses and facilities at the officers' mess for tennis, volleyball and billiards. The climax of the summer social activity is the cadets' dance held in conjunction with the Medical Corps.

The third phase student cannot help but end his practical training impressed by the modern ideas of the officers of the RCDC. Undoubtedly the Corps seems to be the ideal niche to practise ideal dentistry."

Photographs of the 1962 third phase cadets at work and at play are shown below and on the following page. It is evident that they enjoyed both.



#### CLINICAL PHASE TRAINING AT THE RCDC SCHOOL

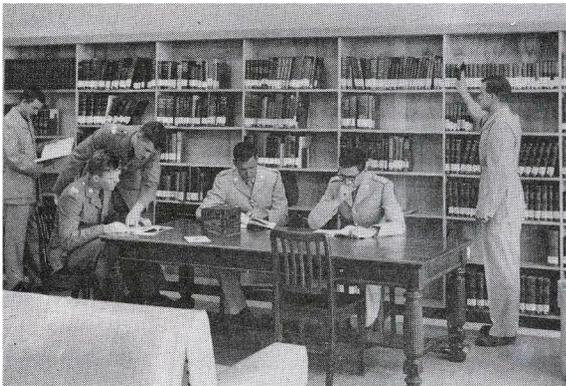
In the foreground Major DH Protheroe is seen instructing a group of candidates.



National Survival Training  
L to R: O/Cdt RT Mori, O/Cdt PR McQueen, Lt Col WR Thompson (Instructor), O/Cdt RWR Horn, O/Cdt PS Wade



Familiarization with Field Dental Equipment  
L to R: 2/Lt JL Girard, 2/Lt JMM Houde, Capt LT Archambault, 2/Lt JLJ Giguere, 2/Lt J Charron, 2/Lt JML Rochefort, 2/Lt GE Brissette



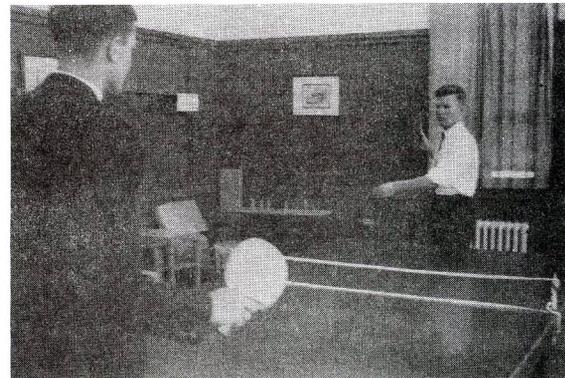
Study Periods in the School Library  
L to R: 2/Lt JML Rochefort, O/Cdt PR McQueen, O/Cdt LW Armstrong, 2/Lt JMM Houde, Capt LT Archambault, 2/Lt JL Girard



Instruction on Equipment Maintenance  
L to R: WO2 EC Carpenter, 2/Lt J Charron, O/Cdt RM MacDonald, O/Cdt RT Mori, O/Cdt WR Kyle, 2/Lt GE Brissette



Recreation  
L to R: O/Cdt RT Mori, 2/Lt CM Mason, O/Cdt GW Hill



Recreation  
L to R: O/Cdt PR McQueen, O/Cdt LW Armstrong

CADET AWARDS

During each of the three practical phases of training, awards are made to the cadets who achieve the highest standard of excellence in theoretical, practical and military endeavour. These awards are comprised of an Honour Cadet Trophy for each phase and the Chief Instructor's Trophy for clinical proficiency in phase three. The winners this year were as follows:



Honour Cadet Trophy  
Phase Three  
2/Lt CM Mason (Alberta)



Honour Cadet Trophy  
Phase Two  
O/Cdt H Griesbach (Toronto)



Honour Cadet Trophy  
Phase One  
O/Cdt IC Wamera (Toronto)



Chief Instructor's Trophy Awarded Jointly to:

2/Lt JMM Houde (Montreal)

O/Cdt RT Mori (Alberta)

## CONCLUSION

An attempt has been made to describe the professional, military and recreational activities of subsidized dental students during their summer training in order to provide prospective candidates for the Dental Officers' Subsidization Plan with an insight into the type of summer employment they may expect if accepted into the plan. It is also considered that RCDC personnel should be familiar with this very important Corps activity so that they can properly advise students interested in a career as a dental officer.

## Reference

1. O'Hara DR, Horn RWR, Kyle WR and Wade PS, RCDC Dental Officer Training. Unpublished paper submitted during training at The RCDC School.

\* \* \* \* \*

## POST-EXTRACTION OSTEITIS

Major IAC MacDonald, DDS

The occasional case of extreme post-operative pain of prolonged duration, may rightly be considered one of the most distressing complications associated with the extraction of teeth. This syndrome, commonly referred to as "dry socket", has been described by many different titles and phrases, including sloughing socket, alveolitis, necrotic socket, localized osteomyelitis or osteitis. When communicating with the patient, "loss or degeneration of the blood clot", or "delayed repair of the tooth socket" would appear more acceptable than the term "dry socket" which is now recognized as inadequate in describing this condition.

Regardless of the terminology used, there is a general recognition that this complication is a localized osteitis over which the operator may have little or no control in preventing, nor can its occurrence be considered a reflection on the ability, skill or judgement of the dental surgeon.

## Signs and Symptoms

Clinical investigation of patients with post-extraction osteitis usually reveals a variety of signs and symptoms; the main one, of course, being pain which has prompted them to seek help. This pain may be confined to the area of involved bone or radiating in character. Associated with the pain there is usually a foul odour emitting from the socket and an associated soft tissue inflammatory response with possible trismus and cellulitis.

## Course of Normal Socket Healing

When a tooth is extracted a sequence of events occurs. The periodontal membrane is torn and there is a rupture of blood vessels. Blood pours into the socket and surrounding tissue and a coagulation process takes place. In this process a fibrin network is laid down entrapping cells and debris. Under normal conditions this clot clings to and protects the walls of the socket. Reparative changes begin with a reaction of the blood vessels. The flow of blood within the vessels becomes slowed followed by diapedesis or migration of leukocytes to the periphery. Blood plasma escapes through the capillary walls producing edema at the periphery of the clot within a day.

This is a typical inflammatory reaction to the injury. At the same time, the capillaries send solid buds of endothelium into the clot which soon develop lumina and become new extensions of the circulatory system. With the development of its own circulation, the clot becomes tissue in the true sense of the word. Fibroblasts enter the clot from the surrounding bone marrow spaces and from the blood vessels of the periodontal membrane that remains attached to the lamina dura. These fibroblasts lay down collagenous fibers and give strength to the new tissue. Simultaneous with the inflammatory changes and organization of the clot, removal of debris takes place. Dead cells, necrotic tissue and foreign material are removed by polymorphonuclear leukocytes and macrophages. In a few days coarse fibrillar bone appears within the collagenous matrix and spreads throughout the entire socket from the base towards the surface and from its periphery to the centre. This is known as immature bone and although the socket appears completely healed clinically, the radiograph will show radiolucency. Three weeks to six months later this immature bone is replaced by well organized mature bone possessing a higher content of calcium salts. In the final stage, the bony trabeculae are laid down in a functional pattern by resorption and deposition so that the outline of the socket is obliterated.

From our review of events that immediately follow tooth extraction, it is quite evident that there are many crucial points at which the orderly course of healing may go astray. It is little wonder that there are so many different and sometimes contradictory theories as to the cause of this departure from the normal healing process.

#### Etiological Theories

While the causative factors of this unfortunate syndrome are still shrouded in mystery, many ideas have been advanced concerning its etiology. Very few writers appear to agree entirely in this regard. Undue trauma has been frequently mentioned, but how many times has post-extraction osteitis developed following the simple removal of a lower bicuspid? Perhaps the question is - what exactly is undue trauma in a particular case?

The effect of the ephinephrine in the anaesthetic solution on the local circulatory function has been mentioned but then again the condition has been observed following extraction under general anaesthesia. There are also those who blame the poor oral hygiene of the patient, yet it will be recalled that the human mouth builds up a high degree of immunity to its own bacterial flora and, statistically, the incidence of the occurrence is not overwhelming on the side of neglected mouths.

Some writers feel that the patient's general resistance to infection is an important factor and advise vitamin therapy. Many others have felt that the age or general condition of the patient has little or nothing to do with post-extraction osteitis but that it is a purely local affliction and, therefore, treatment should be local.

#### Contributing Factors

According to information appearing in the literature, it would seem that there are several factors to be considered which will vary in significance with each and every case. Some of the conditions which may contribute to post-extraction osteitis are listed hereunder:

1. General systemic factors

- a. Age of the patient
- b. Nutrition
- c. Sclerotic bone
- d. Systemic diseases

2. Local trauma

3. Absence of blood clot

4. Micro-organisms

5. Foreign bodies and diseased tissue

1. General systemic factors

- a. Age - It is generally accepted that the older the patient, the greater are his chances of developing a complication following extraction. This acceptance is based on the predication that the young patient has a greater potential for producing active vigorous reparative tissue whereas the older patient, is in a balanced metabolic or catabolic state and his reserve of new growth potential is more likely to be lacking.
- b. Nutrition - There is a constant body need for all the dietary elements in order to maintain health and this requirement increases following injury and infection. Proteins, in particular, are very necessary for the fibroblastic and osteoblastic phases of wound repair. Experiments have shown that there is an increased fibroblastic activity in optimum protein diets and the converse is true in protein deficiency. Archer<sup>(1)</sup> reports investigations where it has been shown that pregnant women are less prone to post-extraction osteitis than non-pregnant women. This is believed due to the increase in globulin, which is a serum protein, from 0.2 per cent in the non-pregnant woman to 0.4 per cent in the pregnant woman. Absence or diminution of the gamma globulin fraction of the blood results in a significant reduction in circulating antibodies and an increased susceptibility to infection.
- c. Sclerotic bone - The presence of a very dense lamina dura of the socket with its small blood supply is regarded as a contributory factor. Some authors recommend drilling holes in the lamina dura in an effort to encourage fresh haemorrhage for nourishment of the clot. This is not considered to be good practice as the danger of introducing bacteria into bone is thus increased.
- d. Systemic diseases - It is generally accepted that a number of systemic diseases will contribute to slow healing of wounds. Diabetes is a very common one as is anaemia because of the decreased oxygen-carrying capacity of the haemoglobin. Any of the blood dyscrasias which exhibit delayed bleeding or clotting can influence greatly the formation and effectiveness of the blood clot.

2. Local trauma

Of all the contributing factors mentioned in the literature, none receives as much consideration as local trauma. The traumatic factor is linked with the blood supply and the fibroblasts that are necessary for the repair

at the extraction site. Excessive instrumentation and force burnish the walls of the alveolus and damage the blood vessels present in the periodontal membrane. This results in an inadequate blood supply which initiates a vicious cycle of events.

### 3. Absence of blood clot

Primary bleeding usually subsides two to five minutes after the rupture of the vessels of the periodontal membrane. If this clot is washed away by excessive flushing of the socket another clot may not form. Furthermore, a well-developed clot may be dislodged when the sponge pack is removed by the patient.

### 4. Micro-organisms

As stated previously, the mouth has "built-in" resistance to the bacteria of the oral cavity. Danger of infection occurs when the area is inoculated with foreign organisms by such means as non-sterile instruments, sponges or unclean hands.

### 5. Foreign bodies

Pieces of calculus, tooth, and filling material may delay the healing due to their presence as the foreign bodies. The resulting inflammation interferes with the organization of the clot.

## Diagnosis

The diagnosis of post-extraction osteitis is entirely clinical. The patient usually returns from 2 - 10 days following the surgery and complains of a throbbing or pounding pain. This pain is usually severe and is frequently manifested in the region of the ear as well as the extraction site. A putrefying odour is invariably present although the patient may not be aware of it. On examination, he may or may not have a slight temperature, swelling of the jaw and accompanying lymphadenitis. The socket may be completely devoid of a clot but if one is present it is usually greyish in colour. In the early stages, when diagnosis is more difficult, the clot may appear quite normal on the surface but if probed, the instrument used meets with no resistance and causes increased pain if allowed to touch the walls of the socket. The deeper structures of the clot are a dark colour and frequently give off a foul odour. The clot, once disturbed, is quite easily removed by gentle cleansing with absorbent cotton and warm saline irrigation.

## Treatment

The many forms of therapy suggested for the treatment of post-extraction osteitis testify that there is no one specific method that will cure the condition in a single treatment.

### 1. Pre-operative and preventative measures

- a. The use of antibiotics systemically or locally may warrant some consideration. It is this writer's opinion, however, that routine pre-operative use of antibiotics in a healthy, comparatively young individual is to be discouraged. Even in cases where infection is present, it is felt that once the source is removed, the defensive mechanisms of the body can quite readily cope with the situation, thus reserving the antibiotics for a time when they are really needed.

- b. Extraordinary care should be employed at all times to minimize trauma. The soft tissues should be carefully reflected where elevators are to be used. One should never hesitate to reflect a flap with a good broad base and remove adequate cortical bone to facilitate easy removal.
- c. In cases where the socket does not appear to fill rapidly with blood and form a clot following surgery, it may be advisable to pack the socket immediately with a loose fitting dressing or plug made of periodontal pack. This will allow a much smaller area between the dressing and bone for the organization of the clot. It also has an anodyne effect thus minimizing normal post-operative pain.
- d. It is recommended that the patient be given written instructions regarding home care immediately following extraction.

## 2. Post-operative

Possibly the first and most important post-operative measure in treatment is early detection. Therefore, the patient should be seen routinely within 48 hours following surgery. If complications are detected, the condition should be clearly explained and treatment commenced to shorten the period of discomfort. The clot is gently probed and, if found necrotic, the socket should be irrigated thoroughly with warm water and any loose fragments carefully lifted out with cotton pliers or small curettes. If the dentist can detect that degeneration of the clot is going to take place, he can relieve the patient of considerable pain by beginning treatment at once. The area is isolated with cotton rolls and the socket gently dried. An anodyne dressing of choice is then inserted and left in place for 24 - 36 hours after which it is replaced by a second dressing. Successive dressings are inserted at longer intervals to keep the socket free from debris despite the fact that the patient may have complete comfort in the later stages. It is important to remember not to pack the dressing tightly into the socket and to ensure that the tip of the dressing is carried to the apical portion.

### Conclusion

Post-extraction osteitis is a painful syndrome in which the blood clot disintegrates leaving unprotected bone. It can be compared to the common cold in that there is no known positive curative treatment but some form of palliative therapy is necessary and helpful. The dentist's primary objective should be to eliminate pain, promote healing and prevent further infection.

### Reference

Archer, W.H. - Oral Surgery, Third Edition 1961

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In Canada the incidence of intraoral cancer is about 4.0 per 100,000 population for males and 1.2 per 100,000 for females. Of all cancer deaths in Canada, intraoral cancer accounts for 3% in males and 1.1% in females.

(From an article "Twenty-five Year Study of Oral Cancer" published in Dental Abstracts, Vol 7, No 9)

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COMBINATION CLASPS IN PARTIAL DENTURE CONSTRUCTION

Lt Col SG Bagnall, CD, DDS

Over the years many authorities have described the advantages of using a wrought wire retentive arm in combination with a cast clasp. The chief advantage described by employing this technique is the stress breaking flexibility which makes it particularly suitable for free-end saddles or on a weak abutment tooth. In addition it remains adjustable after completion and may be adjusted at a later date to increase or decrease retention as may be required. It has also been described as having both esthetic and hygienic advantages over cast clasp arms. Bearing in mind the present day concept of minimum, rather than maximum retention in a partial denture, the use of a combination clasp will occasionally be indicated.

The extra steps involved in fabrication were earlier described as its chief disadvantage and the requirement to solder endangered the physical properties of the wire. Recently, the manufacturers of "Ticonium" produced a chrome cobalt wire which can be incorporated in the wax-up. This wire is then mechanically retained in the completed denture and does not require the use of solder.

Denture wax-up is completed in the normal manner. An appropriate length of 18-gauge round Ticonium wire is then shaped to form a retentive arm, luted to the wax and invested for casting.

The manufacturer recommends the following steps in the laboratory procedure:

1. Determine the length of wire needed by adapting a 14-gauge round wax shape to the abutment tooth. Straighten out and cut a piece of wire to that length.
2. With pliers, make a right angle bend approximately 2mm from the end of the wire. This forms the "foot" which will be imbedded in the casting for mechanical retention.
3. Lay wire, with foot resting on ridge area of cast, against the minor connector leading to occlusal rest. Make a pencil mark on the wire just below the marginal ridge and occlusal rest. This will determine the length of the vertical portion of the wire.
4. With the Dixon pliers, make an acute bend, forming an angle less than 90 degrees. Whether this bend is made to the buccal or lingual will depend on which tooth surface is to be retentive. Usually, however, this will be toward the buccal surface.
5. After making this second bend, try the wire against the minor connector or guiding plane surface to be sure that the angle of the bend still lies below the occlusal rest.
6. A third bend is then made which actually is an adaptation to the contour of the abutment tooth, thus beginning the clasp arm proper. Unless this is done accurately prior to casting, a space between the origin of the clasp arm and the abutment tooth will exist which cannot be corrected by later bending, due to the fact that it is held rigidly by the casting.

7. The wrought wire is now imbedded into the center of the waxed minor connector and held in place against the abutment tooth so that no space exists. This is done by slightly warming the wire, taking care not to have it hot enough to cause the wax to flow. (If this should occur, a film of fluid wax will be drawn beneath the wire, which will result in a thin "shim" of cast metal between the wrought wire and the abutment tooth and which would interfere with the contouring of the wrought retentive arm.)
8. All of the wrought wire but the clasp arm proper is covered with a film of wax, so that at no point will the wrought wire block the flow of molten metal. The remainder of the wrought retentive arm which will be adapted later will extend out into space, to be held by the investment during casting.
9. After this has been done for all abutment teeth, the waxed framework is ready to be invested and cast.

Polishing and Finishing:

When sandblasting and Ti-Lectro polishing (whether with Ticonium wire or PGP), cover wire with a coat of high fusing wax to prevent etching. Use a rubber point lightly to remove any oxide. A bristle brush on a low speed motor is recommended.



FORMULAE AND TECHNIQUE FOR REDUCING AND INTENSIFYING RADIOGRAPHS

WO2 Sherry JM

Established methods of exposure and processing routinely produce radiographs of good diagnostic quality. However, there are times when radiographs do not meet the required standard. This usually happens when it is not convenient to bring the patient back for more "retakes". The following techniques and formulae for reducing and intensifying are being used here with good results.

The solutions used by this writer are prepared according to the standard formulae reported by Simpson<sup>(1)</sup> as early as 1930. These formulae are just as effective today as they were at that time, despite the improvements in X-ray film.

The solutions are compounded as follows:

A. REDUCING SOLUTION FORMULAE

STOCK SOLUTION A

Sodium Cyanide .....	65 grs
Water qs ad .....	32 ozs

STOCK SOLUTION B

Iodine .....	45 grs
Potassium Iodide ..	80 grs
Hist. aqua qs ad ..	1 oz

These two stock solutions are mixed in a ratio of 1 oz of Solution A to 20 drops of Solution B.

B. INTENSIFYING SOLUTION FORMULA:

Potassium Iodide .....	16 ozs
Mercuric Iodide .....	80 grs
Hypo .....	5 grs
Water qs ad .....	16 ozs

REDUCING TECHNIQUE:

Films should be well washed after fixation, or if already dry, washed for five minutes prior to reducing. A granite-ware pan 16" square, in which the receptacles may be placed, is an aid in confining any solution or water which may be dropped during the operation. The stock reducing solution is mixed (1 oz of "A" to 20 gtt of "B") in a small dish and applied with a pledget of cotton tightly rolled on a wooden applicator. If the general density of the negative is too great, the film can be submerged in the solution for periods of one to five seconds to obtain the desired density of shadows before reduction of the highlights are begun. To stop the action of the reducer, the film is dipped in water.

For local reduction, the film, emulsion side upward, is held so that the solution will flow toward the area requiring this action. This flow may often be regulated by gently curving the film to produce a concavity at the desired location by pressure of the thumb and finger on opposite edges of the film and should always be held in this manner to avoid distorting the softened emulsion. After reduction, the film is washed for five minutes in running water to remove the reducing solution. It must be remembered however that after fixation of any film the total "washing time" and "after reduction washing time" must be at least twenty minutes to remove the sodium thiosulfate fixer. (2)

The reducing solution should be freshly mixed for use but as the action slows a few drops of solution "B" can be added.

INTENSIFYING TECHNIQUE:

The intensifying solution is used in the following manner. After the negative is fixed and washed, it is placed in the solution for a short period of time ranging from a few seconds to a minute depending upon the amount of intensification desired. It is then placed in a slow developing solution for three minutes to clear and fix the image. A small quantity of developing solution placed in a separate container may be used for this purpose and then discarded. The film is then washed in running water for the normal period.

POSSIBLE COMPLICATIONS

It is important to note that sodium cyanide is highly poisonous either by absorption in the mouth or to a lesser degree by inhalation. The solution does not affect the skin unless the user has a susceptibility to iodine. Caution is indicated in the handling of this drug. Hands and utensils should be thoroughly washed and the "no smoking" edict should be observed due to high volatility of the sodium cyanide.

SUMMARY:

A technique and the formulae for reducing and intensifying dental radiographs has been outlined. This technique is simple and its use will often eliminate additional radiation exposure necessitated by the need for "retakes".

REFERENCES:

1. Simpson, C.O. The Technique of Oral Radiography, St. Louis, Mosby, 1930. p. 181.
2. McCall and Wald, Clinical Dental Roentgenology, Phil. Pa. Saunders, 1958. p. 131.

THE SURGICAL CORRECTION OF PERIODONTAL POCKETS TO ACHIEVE  
OPTIMAL PHYSIOLOGICAL FORM OF THE PERIODONTIUM

Capt DG Gardner, DDS

Pocket eradication consists of reducing the depth of the periodontal pocket to that of a physiological sulcus. It is, however, only one part of periodontal therapy and should not be considered an end in itself. The basic guiding concept here is that the therapist is first treating a patient who has, as one facet of his make-up, periodontal disease. In turn, periodontal disease is only one aspect of the patient's oral condition. Finally a local area of periodontal pockets is only a part of the overall periodontal condition of the patient. The dentist must therefore consider "the whole patient concept" and "the whole mouth concept". Bearing this in mind, the ultimate goal as far as the periodontal phase of treatment is concerned, is the cessation of pathological destruction of the periodontium and the maintenance of periodontal health.

Scaling and Curettage or Surgery

There are two main methods for the local treatment of periodontal pockets:

Scaling and Curettage; and  
Surgical - including gingivectomy, flap operations, alveolar bone contouring, electrosurgery, chemosurgery and extraction for periodontal reasons.

Scaling and curettage is, in itself, a surgical procedure. However it is normally considered apart from those listed here as surgical methods. Scaling and curettage is the method of choice if the periodontist feels that the required result can be obtained in this manner. If this method will not suffice, or if it has already failed, he may turn to the surgical techniques. This decision depends upon a proper sequence for the approach to any periodontal problem. One such sequence might be:

Examination;  
Treatment of acute conditions;  
Possible gross scaling;  
Diagnosis, prognosis and treatment planning;  
Presentation of proposed treatment to the patient;  
Pocket eradication;  
Patient education and oral physiotherapy instruction; and  
Other periodontal and operative procedures.

One important factor which affects the choice between scaling and curettage, and surgical methods is aesthetics, especially in the maxillary anterior region.

Optimal Physiological Form of Periodontium

In order to treat the diseased periodontium effectively, the dentist must have a clear idea of the ultimate goal. Clinically, the ideal is the familiar pink, stippled gingiva with its cone-shaped papillae, well adapted knife-edged margins, gingival sulci of  $\frac{1}{2}$ -1 mm and normal interdental grooves. In addition, the gingiva does not bleed when touched and is self-cleansing. Recession, although not desirable, may be present. However, the gingiva should have the same physiological form, albeit at a more apical level.

## Architecture of the Alveolar Bone

It is noteworthy that pockets tend to develop more often in the interdental area than either buccally or lingually. The interdental bone is therefore presumed to be the weakest spot, the prime target of periodontal disease.

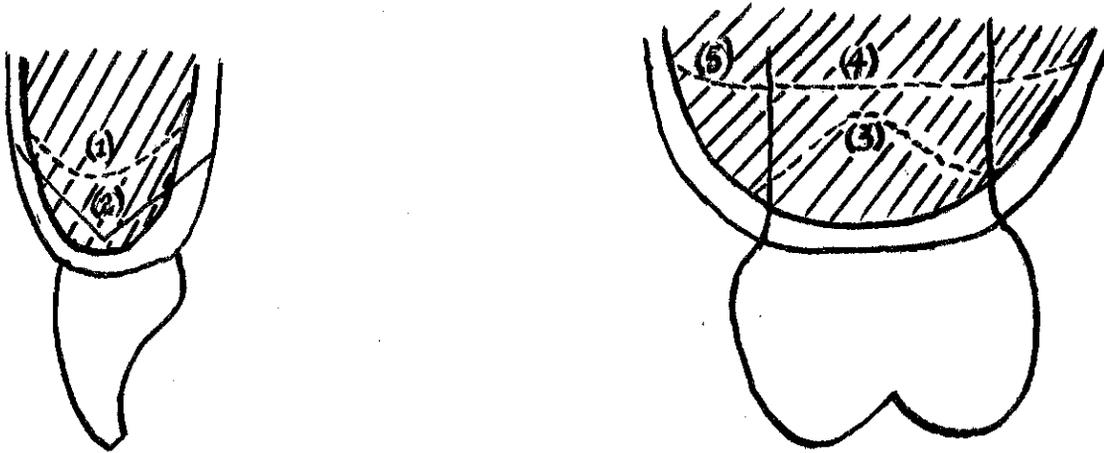


Fig. 1

Fig 1 shows the normal interdental bony architecture. In the anterior region it is conical; in the posterior region it is spherical. Theoretically, bone loss in the anterior region alters the bony contour little - it remains conical (1). A simple gingivectomy, using a long bevelled incision, (2) should, therefore, re-establish the optimal form of the gingiva because the architecture of the underlying bone is also still optimal. In practise, however, such a regular resorption is rare and some contouring of the alveolar bone is necessary in many cases of gingivectomy in the anterior region.

In the posterior region the bony resorption results in interproximal craters (3), blunted interproximal cones (4), and thick buccal or lingual ledges in the marginal areas (5). These are the three most common osseous deformities in this region. Under these circumstances a simple gingivectomy could never result in the desired form of the gingiva because the underlying bony topography is no longer optimal, thus if proper physiological form of the periodontium is to be obtained, recontouring of the bony architecture is necessary.

### Treatment

Simply stated, the technique described in this article could be called "gingivectomy with bone contouring".

Use block or infiltration anaesthesia and inject into each interproximal papilla. This helps to control the haemorrhage and makes the gingiva more rigid and easier to cut.

Perform a routine gingivectomy to the crest of the bone and remove all the granulation tissue from the interproximal areas. This assists in reducing the bleeding as granulation tissue is very vascular.

Scale the roots very thoroughly, irrigate and dry the area.

Using a periosteal elevator, ease back the gingiva from the bone. Examine the anatomy of the bone for interproximal craters or

or infrabony pockets, blunted interproximal crests and thick buccal or lingual ledges. If the bony topography is satisfactory, the operation is complete and a surgical pack may be placed. If, however, any of these defects are discovered, a flap must be raised and steps taken to re-establish the optimal bony architecture.

### 1. Infrabony Pockets

The dentist must decide whether or not he can obtain re-attachment. Therapy aimed at re-attachment is usually limited to infrabony pockets with three osseous walls. These are most commonly found in the mandibular area (Fig 2), because of the thickness of the bony ridge, the density of the cortical plates, and the width of the proximal contact surfaces. In attempting re-attachment, make sure that all soft tissue between the root and the osseous walls of the pocket is removed. Plane the root surfaces thoroughly and after the first clot has formed, remove it to permit a second one to develop. This procedure ensures that no foreign elements remain in the final clot.

If it is not feasible to attempt re-attachment, use No 6 - 8 round burs to remove the lateral wall of the pocket.

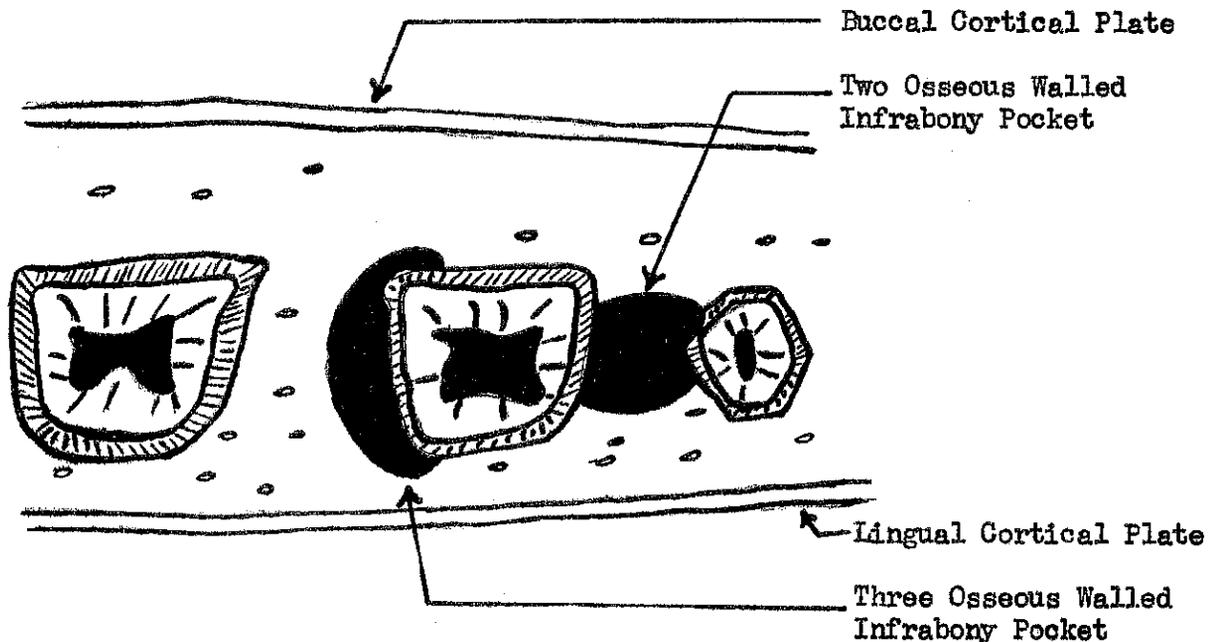


Fig. 2

### 2. Other Bony Defects

The other bony defects are treated by using a round bur to cut interdental and interradicular grooves, to obtain the spherical or conical shape of the interdental cones, and to change ledges to knife-edges (see Figs 3 and 4). An attempt is made to obtain a scalloped effect.

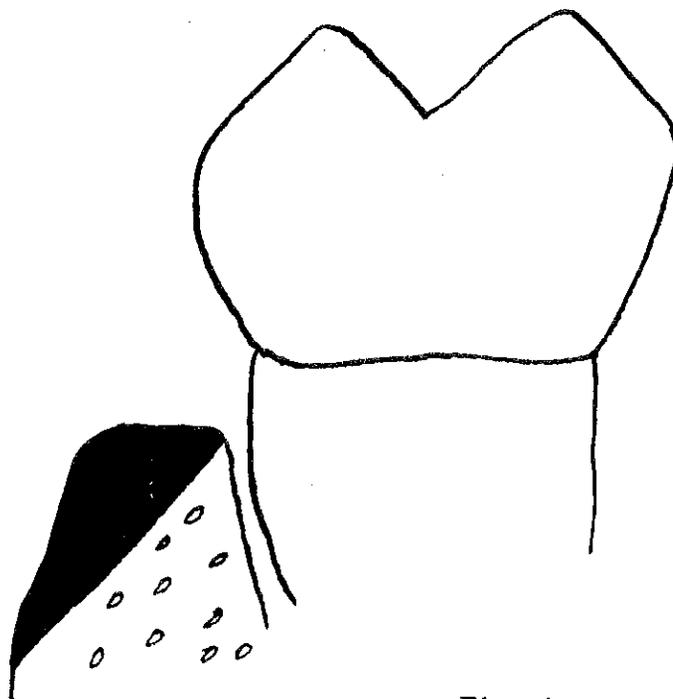
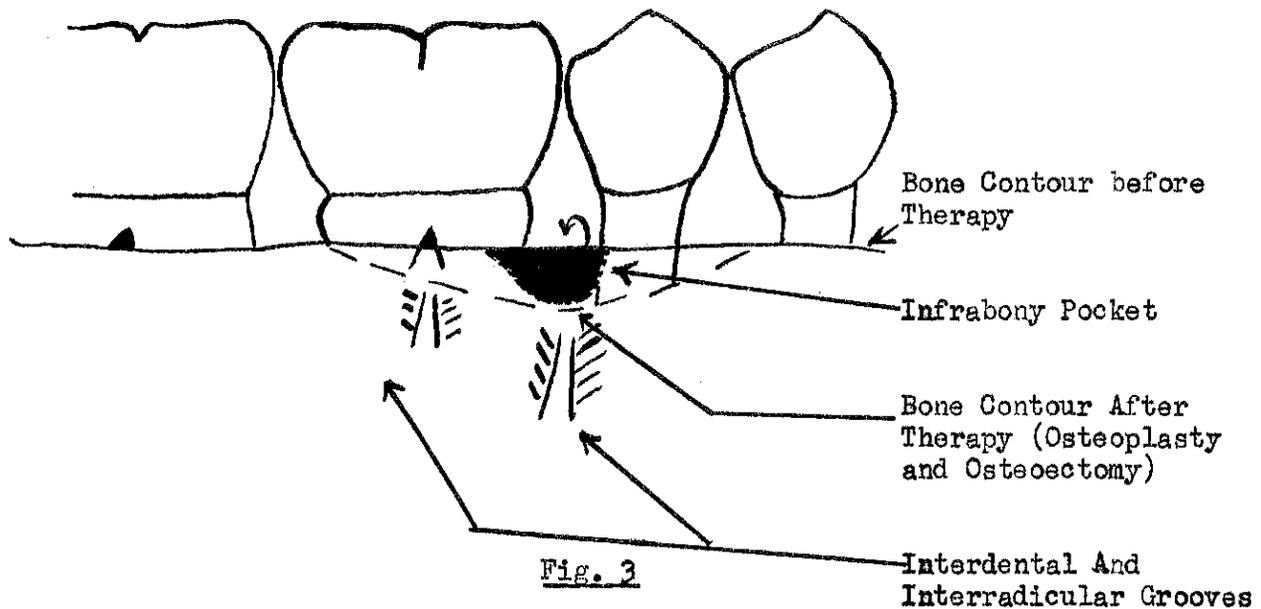


Fig. 4

The treatment for bifurcation and trifurcation involvements depends upon the degree of bone loss. If it is minimal, all that may be required is a recreating of the interradicular groove; if it is more marked, then the interradicular regions must be curetted out. This altering of the bony architecture is called osteoplasty when no supporting bone is removed and osteoectomy, if supporting bone is removed. The basic concept to be remembered in the treatment of these conditions is that the dentist should attempt to create a physiologic pattern which resembles the normal bony architecture even though it is in a more apical position in relation to the teeth.

Following surgical intervention, replace the flap and insert a periodontal pack. Remove the pack after one week and inspect the area thoroughly. Eliminate any small pieces of calculus which have been missed at the time of the surgery and re-pack the region if necessary.

When the area is healed, polish the clinical crowns of the teeth using periodontal files, polishing strips interdentally, and pumice on a rubber cup. Correct such faults as loose contacts and occlusal disharmonies. Instruct the patient in the use of toothbrush and interdental stimulators, emphasize the part he must play in helping to maintain the tissues in health and stress the necessity for frequent dental examinations.

### Conclusion

It must be realized that it is of little benefit to perform a gingivectomy when poor bony architecture is left uncorrected. If the residual bony architecture is acceptable, a simple gingivectomy will suffice but an abnormal osseous architecture must be corrected to achieve an optimal physiological form of the periodontium.

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### WELCOME TO THE CORPS

A warm welcome is extended to the following personnel who have transferred recently to the RCDC:

Pte	NJ	Cable	-	to	FOB Winnipeg
Pte	G	Drapeau	-	to	3 Det RCAMC Quebec
Pte	RA	Garnhum	-	to	RCAF Stn Trenton
Pte	A	Girouard	-	to	CFH Kingston
Pte	JF	Giroux	-	to	The RCDC School
Pte	GMR	Gravel	-	to	The RCDC School
Pte	DW	Griffiths	-	to	RCAF Stn Namao
Pte	BF	Hannah	-	to	FOB Winnipeg
Pte	WD	Horne	-	to	The RCDC School
Pte	HC	King	-	to	The RCDC School
Pte	JP	Lambert	-	to	The RCDC School
Pte	RS	Lindsay	-	to	7 PD London Ont
Pte	LI	MacLean	-	to	HQ BC Area Vancouver
Pte	DF	Middleton	-	to	Camp Gagetown
Pte	JLP	Nadeau	-	to	No 1 Dent Eqpt Dep Petawawa
Pte	TR	O'Mara	-	to	RCAF Stn Trenton
Pte	LH	Pion	-	to	HMCS Stadacona
Pte	LA	Russell	-	to	RCAF Stn Moose Jaw
Pte	JH	Thorburn	-	to	Camp Gagetown
AW2	RD	Armstrong	-	to	RCAF Stn Portage la Prairie
AW2	AM	Burdell	-	to	RCAF Stn Namao
AW2	SJD	Clutterbuck	-	to	RCAF Stn St Hubert
AW2	EL	Gunville	-	to	RCAF Stn Camp Borden
AW2	MA	Lawrence	-	to	RCAF Stn Camp Borden
AW2	SC	MacDonald	-	to	RCAF Stn Winnipeg
AW2	JE	Patterson	-	to	RCAF Stn Trenton
AW2	JE	Richardson	-	to	RCAF Stn Cold Lake
AW2	DN	Scarborough	-	to	RCAF Stn Bagotville
AW2	JM	Scott	-	to	RCAF Stn Trenton
AW2	LS	Seraphin	-	to	RCAF Stn Camp Borden

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PROMOTIONS

Congratulations are extended to the following officers and men on their recent promotions:

Major	WR	Thompson	-	to Lt Col
Capt	HG	Bunston	-	to Major
Ssgt	HJ	Stokes	-	to WO2
Sgt	EE	Mazerall	-	to Ssgt
L Sgt	JG	Moore	-	to Sgt
Cpl	JWW	Broomfield	-	to Sgt
Cpl	AL	Strub	-	to Sgt
Pte	TJ	Deloughery	-	to Cpl
Pte	JAY	Ferland	-	to Cpl
Pte	BA	Green	-	to Cpl
Pte	RB	Johnson	-	to Cpl
Pte	DL	Kerr	-	to Cpl
Pte	JM	MacLean	-	to Cpl
Pte	OW	Mandrusiak	-	to Cpl
Pte	IA	Mason	-	to Cpl
Pte	PA	McCoy	-	to Cpl
Pte	PD	Peterson	-	to Cpl

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

RETIREMENTS

Our best wishes for a happy retirement are extended to the following personnel who have given many faithful years of service to the Corps:

Lt Col	AR	Smith	-	RCAF Stn St Jean
WO2	JM	Jones	-	The RCDC School
Sgt	GW	Blanke	-	15 Dent Coy
Sgt	GS	McConnell	-	12 Dent Coy
Sgt	V	Krymlak	-	11 Dent Coy

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

RELEASES

The following personnel have taken their release and with them go our best wishes for future success:

Capt	TM	Johnston	-	The RCDC School
Capt	FW	Lovely	-	12 Dent Coy
Sgt	WH	Fougere	-	12 Dent Coy
Cpl	WW	Webster	-	11 Dent Coy
Cpl	JA	Rathe	-	35 Fd Dent Unit
LAW	MBA	Perusse	-	11 Dent Coy
LAW	MH	Schmidt	-	12 Dent Coy
LAW	LA	Van der Stap	-	15 Dent Coy
AWL	DT	Lawrence	-	13 Dent Coy

Cpl RJE Lalonde has recently been released from the Corps to the National Defence Medical Centre (DVA) for continuing treatment. It is our sincere hope that he will regain good health in the near future.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

POSTINGS

The following postings have been effected since the last issue of the Quarterly:

Major	C	Brown	- to Ft Beausejour from Ft Prince of Wales, 4 Fd Dent Coy
Major	HG	Bunston	- to RCAF Stn Greenwood from HMCS Shearwater
Major	AG	Taylor	- to HMCS Shearwater from HMCS Bonaventure
Capt	MA	Abramson	- to HMCS Shearwater from HMCS Cornwallis
Capt	FC	Arpin	- to HQ 15 Dent Coy Montreal from CBUME
Capt	JOL	Bourget	- to CBUME from CJATC Rivers
Capt	DS	Campbell	- to CPH Halifax from HMC Dockyard Halifax
Capt	WR	Collier	- to 4 Fd Dent Coy from Whitehorse
Capt	GT	Crossman	- to RCAF Stn Greenwood from 4 Fd Dent Coy
Capt	WJ	Froese	- to Ft Churchill from HQ Manitoba Area
Capt	LC	Gray	- to RCAF Stn Vancouver from HQ BC Area
Capt	Y	Kamachi	- to RCSME Vedder Crossing from HMCS Naden
Capt	VD	Kvedaras	- to RCAF Stn Clinton from RCAF Stn Trenton
Capt	RJ	Paturel	- to RCSME Vedder Crossing from HQ Ft Churchill
WO2	VO	Blackmore	- to FOB Winnipeg from Whitehorse
WO2	SL	MacLean	- to HMCS Shearwater from HMC Dockyard Halifax
WO2	HJ	Stokes	- to HQ 15 Dent Coy Montreal from HMCS Naden
Ssgt	SM	Toole	- to HMCS Naden from Workpoint Bks Esquimalt
Ssgt	OR	White	- to QM Stores Calgary from RCAF Stn St Jean
Sgt	M	Beauvais	- to RCAF Stn Camp Borden from The RCDC School
Sgt	KPH	Buchholz	- to RCAF Stn Winnipeg from Ft Churchill
Sgt	MG	Dean	- to HMC Dockyard Esquimalt from HMCS Naden
Sgt	JRA	deBlois	- to No 6 RD Trenton from RCAF Stn Goose Bay
Sgt	AS	Field	- to RCAF Stn Clinton from HMCS Stadacona
Sgt	DLG	Flesher	- to DGDS Ottawa from No 4 Fd Dent Coy
Sgt	P	Fox	- to CBUME from HMCS Naden
Sgt	SG	Fraser	- to HMCS Bonaventure from HMCS Stadacona
Sgt	FG	Grundy	- to HMCS Stadacona from HMC Dockyard Halifax
Sgt	DF	Hill	- to RCAF Stn Summerside from 4 Fd Dent Coy
Sgt	J	Hossdorf	- to No 4 Fd Dent Coy from Calgary
Sgt	FK	MacKay	- to HMCS Shearwater from HMCS Bonaventure
Sgt	GE	McGunigal	- to RCAF Stn Moose Jaw from Camp Shilo
Sgt	JG	Moore	- to 4 Fd Dent Coy from HQ 11 Dent Coy Edmonton
Sgt	DB	Playford	- to Ft Churchill from RCAF Stn Camp Borden
Sgt	WS	Richardson	- to RCAF Stn Goose Bay from RCAF Stn Camp Borden
Sgt	AL	Strub	- to No 1 Dent Eqpt Dep Petawawa from CBUME
Sgt	GH	Taylor	- to Whitehorse from Calgary
Sgt	RL	Thornton	- to Whitehorse from Griesbach Bks Edmonton
Sgt	HD	Wagstaff	- to The RCDC School from HMCS Cornwallis
Sgt	DB	Wood	- to No 35 Fd Dent Unit from Whitehorse
Sgt	JR	Yeates	- to HQ 14 Dent Coy from FOB Winnipeg
L Sgt	JC	Bleakney	- to HMCS Bonaventure from HMC Dockyard Halifax
L Sgt	PJ	Dumas	- to CBUME from No 1 Dent Eqpt Dep Petawawa
Cpl	JIJ	Boulanger	- to Longue Pointe from CBUME
Cpl	WE	Bussell	- to RCAF Stn Winnipeg from FOB Winnipeg
Cpl	JRM	Chayer	- to RCAF Stn St Jean from CMR St Jean
Cpl	PAP	Hughes	- to HMC Dockyard Halifax from HMCS Shearwater
Cpl	AF	Randall	- to HMC Dockyard Halifax from HMCS Stadacona
Cpl	G	Sapergia	- to RMC Kingston from Camp Picton
Pte	RS	Black	- to HMCS Cornwallis from Camp Gagetown
Pte	HL	Boring	- to RCSME Vedder Crossing from Griesbach Bks
Pte	RJ	Forward	- to RCAF Stn Uplands from RCAF Stn Trenton
Pte	B	Hannay	- to Calgary Bks from RCAF Stn Cold Lake
Pte	HH	Nogler	- to RCAF Stn Greenwood from HMCS Bonaventure

POSTINGS (Cont'd)Airwomen

Sgt	MP	Foley	- to RCAF Stn Camp Borden from RCAF Downsview
Cpl	KP	Palmer	- to 3 (F) Wing from 2 (F) Wing, 35 Fd Dent Unit
LAW	AC	Perrier	- to RCAF Stn Comox from RCAF Stn St Hubert
LAW	MR	Thibault	- to 35 Fd Dent Unit from RCAF Stn St Hubert
LAW	LP	Yakemchuk	- to RCAF Stn St Hubert from RCAF Stn Parent
AW1	SJ	McMillan	- to RCAF Stn Goose Bay from RCAF Stn Lac St Denis
AW1	DJM	McNichol	- 35 Fd Dent Unit from RCAF Stn Rockcliffe
AW2	CM	Fraser	- to RCAF Stn Trenton from 6 RD Trenton

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TRAINING

During the period since the last issue of the Quarterly, Corps personnel have undertaken a variety of training as follows:

Royal College of Surgeons, London, England - General Oral and Dental Surgery - 22 Oct - 14 Dec 62

Major	LA	Richardson
Major	FD	Charman

US Naval Dental School, Bethesda, Md - Crown and Bridge - 15 Oct - 27 Nov 62

Major	AG	Taylor
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RCDC School Courses

Capt to Maj Qualifying - 17 Sep - 26 Oct 62

Capt	LJE	Bosse
Capt	JF	Eadon
Capt	RH	Headley
Capt	WB	Hudgins
Capt	JH	Marion
Capt	HK	Meisner
Capt	LA	Reynolds

Technical Dental Therapist - 3 Sep - 7 Dec 62

WO2	TL	Batten
WO2	RH	Daw
WO2	H	Thorsson

Dental Technician Laboratory Group 4 - 17 Sep - 26 Oct 62

Sgt	WJ	Arnsby
Sgt	JA	Christiansen
Sgt	FG	Grundy
Sgt	DF	Hill
Sgt	AJ	Hughes
Sgt	FM	Kennedy
Sgt	GF	Keogh
Sgt	KS	Rothwell
Sgt	G	Shechosky
Sgt	RL	Thornton

Dental Assistant Group 1 - 9 Oct - 9 Nov 62

Cpl	JRR	Roy
Pte	JB	Arsenault
Pte	N	Cable
Pte	DJ	Davies
Pte	GN	Fathers
Pte	RJ	Forward
Pte	RA	Garnhum
Pte	JRY	Gratton
Pte	B	Hannay
Pte	DH	Hardy
Pte	GED	Hayes
Pte	TJ	Herrett
Pte	WD	Horne
Pte	DF	Ife
Pte	C	Isachance
Pte	DK	Mand
Pte	RG	Moffat
Pte	LG	Peverill
Pte	OR	Sorensen
LAW	SS	Fitzpatrick
AWL	HL	Brooker
AWL	ME	Koch
AWL	JM	Roberts
AWL	SM	Thiele
AW2	I	Gruener

No 1 Dental Equipment Depot CoursesDental Equipment Repairer Group 1 - 24 Sep - 14 Dec 62

Cpl	EA	Duve
Pte	PD	Whynott

Dental Storeman Group 1 - 10 Sep - 19 Oct 62

Cpl	RW	McDonald
Pte	JLP	Nadeau

CFMSTC Camp Borden - First Aid Instructor Tri-Service Course -  
10 Sep - 5 Oct 62

WO2	JE	Shiner
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RCASC School Camp Borden - Sr NCO Course3 Sep - 26 Oct 62

A/Sgt	HK	Drawe
A/Sgt	EPH	Sprathoff

10 Sep - 2 Nov 62

Cpl	EB	Borden
Cpl	N	Demedash
Cpl	ADT	Gardner
Cpl	WG	Harmer

Command Junior NCO Courses

Pte	BA	Green
Pte	OW	Mandrusiak
Pte	PA	McCoy
Pte	DH	McKay

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VITAL STATISTICSDIRECTORATEMarriage

Mr Dennis Robillard was married to Miss Fleurette Traversy at Eastview, Ont on 8 Oct 62.

RCDC SCHOOLBirths

To Ssgt and Mrs GEC Bradley, a daughter, on 5 Oct 62.

11 DENT COYBirths

To Capt and Mrs JP Wilcock, a son Christopher, on 5 Oct 62.

12 DENT COYBirths

To Sgt and Mrs RK Jones, a daughter Shelley Lynn, born 28 Aug 62.

13 DENT COYBirths

To Capt and Mrs PJ Coulombe, a son, Marc Henri, born 26 Sep 62.

To Sgt and Mrs RB Innis, a daughter, Patricia Nora, born 8 Apr 62.

To Sgt and Mrs HM McCurdie, a son, Ronald Stuart, born 23 Jul 62.

To Cpl and Mrs TW Thrasher, a daughter, Evelyn Mildred, born 2 Jul 62.

To Cpl and Mrs WL Wylie, a daughter, Christina Susan, born 18 Sep 62.

Marriages

Capt RDH Bunt was married to Miss Marianne Grace Scheffield at Ottawa, Ont on 1 Sep 62.

Capt AB Perkin was married to Miss Heather Margaret Andrews at Toronto, Ont on 6 Oct 62.

13 DENT COY (cont'd)Hospital

Cpl WR Dawson - 18 - 30 Jul and 21 Aug - 4 Sep 62  
 Cpl WL Wylie - 23 - 27 Jul 62  
 Pte OR Sorensen - 21 - 29 Aug 62

14 DENT COYHospital

Capt JJPG Houle admitted to Shilo Military Hospital on 19 Aug 62 and discharged on 24 Aug 62.

Sgt DM Hamilton admitted to Winnipeg Military Hospital on 21 Aug 62 and discharged on 24 Aug 62.

15 DENT COYBirths

To Sgt and Mrs Tony Bourgeois, a son, Joseph Jean Bernard, born 17 Jul 62.

Marriages

Cpl CVS Forsythe to Violet Marie Cox on 25 Aug 62 at Truro, NS.

LAW Dennis to LAC R Steeves on 27 Jul 62 at Goose Bay, Labrador.

Miss E Lapointe to Mr Benoit Villeneuve on 1 Sep 62 at Quebec City.

Hospital

Cpl JRM Chayer, Montreal Military Hospital - 28 Aug - 17 Oct 62

LAW Steeves, Goose Bay, 18 Sep - 25 Sep 62

Mrs I Johnston, 27 Aug - 15 Oct 62

4 FD DENT COYBirths

To Lt Col and Mrs Garth C Evans, a daughter, Marea, born at Iserlohn, Germany on 29 Jul 62.

To Capt and Mrs RH Headley, a daughter, Selena, born at Iserlohn, Germany on 1 Aug 62.

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DIRECTORATE OF DENTAL SERVICES NEWSAHQ Team Wins Canadian Army Rifle Championship

Pictured below is Major JC Brick receiving the Letson Trophy from the donor, Major-General HFG Letson, CB, CBE, MC, ED, CD, at Comnaught Ranges, Ottawa. This trophy is presented annually to the team winning the Canadian Army Rifle Championship. Major Brick accepted, as Captain of the Army Headquarters (Adjutant-General) team, and will accompany the team next summer to Bisley, England where it will represent the Canadian Army. Major Brick is to be congratulated both as Captain of the winning team and for his personal achievement as a marksman.

DGDS Attends Annual Meeting of The RCDC Association

During the first week of October, Brig KM Baird and Col IAL Millar visited The RCDC School to interview candidates of the various courses in progress and also to participate in the opening ceremonies of the 14th Annual Meeting of the RCDC Association. During the Mess Dinner on the evening of 4 Oct 62 the Director General announced the winners of this year's awards in the General Efficiency Competition. Further details concerning the competition appear elsewhere in this issue.

### Director General Presents RCDC Crest to US Naval Dental School

The presentation of a framed RCDC Crest for the US Naval Dental School, Bethesda, Md, was made by Brig Baird during a recent visit to Camp Borden and was accepted by Commander RR Troxell, USN (DC), exchange officer at The RCDC School. Other officers in attendance at this ceremony are pictured below:



L to R: G/C IH Barclay, Commanding Officer, CFMSTC, Capt DG Cartwright, Colonel IAL Millar, Lt Col WR Thompson, Major JM Smith, Major JJN Wright, Colonel CE Purdy, Commandant, The RCDC School and Major PS Sills

### Lt Col SG Bagnall on Trip to Far North

Lt Col SG Bagnall was the RCDC representative on a recent RCCS inspection trip well inside the Arctic circle. In addition to providing dental treatment at Alert, he was able to liaise with the American detachment at Thule, Greenland.

### Dental Officers Serve on University Staffs

Two officers of the RCDC are currently serving as part-time staff members of dental schools in Canada. Col AT Roger is lecturing in Oral Surgery at the Faculty of Dentistry, Dalhousie University for the second year. Assisting for the first time in the clinical program of the Faculty at the University of Manitoba is Major LA Richardson.

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## THE RCDC SCHOOL NEWS

### CGS Visits School

Lieutenant-General G Walsh, CBE, DSO, CD, Chief of the General Staff visited The RCDC School on 15 Aug 62. Following discussions with the Commandant the CGS toured the school and observed Phase 3 officer cadets undergoing clinical indoctrination.

### Lt Col Thompson Presents Clinic at EODA Meeting

Lt Col WR Thompson, instructor in Oral Surgery at The RCDC School presented a clinic entitled "Complications in Exodontia and Minor Oral Surgery" at the annual convention of the Eastern Ontario Dental Association held in Ottawa 23 - 25 Sep 62.

### Capt Casterton Returns to Duty

Capt CA Casterton's many friends will be pleased to learn that he returned to duty after a long illness. He was in Toronto Military Hospital from 21 Jun till 14 Sep and after sick leave returned to duty on 9 Oct 62.

### WO2 Jones Retires

On 11 Sep the staff of the School gathered in the Common Room to bid farewell to WO2 Jack Jones who is retiring from the Corps after more than 23 years' service. Following an appropriate address, Col Purdy presented WO2 Jones with a decanter set on behalf of the staff.

### RCDC Ladies on Project for Church

The wives of RCDC personnel, Camp Borden, are busily engaged in a project to raise funds which will be used to purchase a stained glass window (RCDC crest) for the Protestant Chapel. There are, at present, stained glass crests of several other Corps in place in the chapel and the ladies are to be commended for their efforts in this direction.

### School Staff Members Aid in Search for Drowning Victim

It is not often that RCDC personnel become involved in aid to civil power activities and when it does occur, it is certainly newsworthy. The case in point highlights the alertness and willingness of three NCOs of The RCDC School staff.

WO2 HC Bilbey and Cpl H Chamberlain, two constant fishing companions, noticed, while fishing, a car upside down in the middle of the Nottawasaga River near Camp Borden. Most people will admit that finding a car in a river is no great feat but in this case the vehicle was amongst a graveyard of old cars. In any event they notified the local farmer who assured WO2 Bilbey and Cpl Chamberlain that he was not the owner and the police were alerted. The police had the car removed and discovered that the woman who was driving it had been missing for a couple of days.

Cpl WA Jackson, a member of the Aquateers of Canada, and three other club members were asked by the OPP and RCMP to search for the woman who was presumed drowned.

Due to heavy rains, the search was interrupted for several days and it was not until nine days after the woman was reported missing that the search

was able to be continued, except for surface patrols by the police. Cpl Jackson and the other three aquateers were then called back to carry out the underwater search and recovered the body in a log snag three hours later.

WO2 Bilbey and Cpl Chamberlain are to be commended for their alertness in reporting the out-of-place automobile and Cpl Jackson deserves much credit for his willingness to participate in a hazardous underwater search.

#### Distinguished Visitors

- 6 Sep 62 - Major General G Kitching, General Officer Commanding, Central Command.
- 7 Sep 62 - Members of the Permanent Joint Board on Defence.
- 4-5 Oct 62 - Brig KM Baird, Director General of Dental Services for the Canadian Forces and Col IAL Millar, Directorate of Dental Services, Army Headquarters.
- 4-5 Oct 62 - Brig HET Doucet, Deputy Adjutant-General, Army Headquarters.
- 10 Oct 62 - Major General AJ Clyne, Director General of Medical Services for the Australian Army.

#### Brigadier Wansbrough Presents Photograph

During his recent visit to the School, Brigadier EM Wansbrough presented a photograph of Camp Borden, as it appeared in 1916, to Col CE Purdy for inclusion in the RCDC School museum.

#### RCDC School Officers Host Local Dental Society

Members of the Muskoka and Simcoe Dental Association were guests of Col Purdy and the officers of The RCDC School for a meeting and dinner held on 17 Oct. Cdr RR Troxell, USN Dental Corps, Chief Instructor, presented an illustrated lecture entitled "Extensive Restorative Procedures Employing Simple Restorative Techniques" and Lt Col WR Thompson gave a presentation and film on "Oral Cancer". The dinner was held at the Headquarters Camp Borden Officers' Mess.

#### Sports

Cpl RS Walker was a member of the Camp Borden Soccer Team which participated in the Pearkes Trophy playoffs held in Victoria. He also played for the CFMSTC "Combines" who won the soccer championship in the Central Command Olympics at Kingston.

Capt A Van Ryssel successfully defended The RCDC School golf championship and retained the Fletcher Trophy.

A team of golfers from The RCDC School were runners-up for the Tuffy Tieman Trophy which is awarded for annual competition between CFMS and RCDC personnel in Central Command. School personnel participating were: Lt Col WR Thompson, Maj JJN Wright, Capt A Van Ryssel, Capt WB Hudgins, WO2 TL Batten and Cpl WA Jackson.

The three very ardent fishermen amongst the school staff have been reporting excellent catches. WO2 Bilbey has a six and one half pounder to his credit, Cpl Chamberlain a seven pounder but WO2 Ponton got the big one a nine pound Rainbow Trout.

RCDC Crest Arrives at Bethesda

Lt Col JW Turner, instructor in Operative Dentistry at the School and currently on an exchange posting at the US Naval Dental School, Bethesda, Md is pictured below with Capt AR Frechette, Commanding Officer of the Naval Dental School. These officers are holding the mounted RCDC Crest which was presented to our sister service in recognition of the close ties which exist between the two Dental Corps.



NO 1 DENTAL EQUIPMENT DEPOT NEWSSports

Major Fletcher and Lt Kostyniuk are carrying on where they left off last year in the bowling league with averages of 242 and 243 respectively.

Miscellaneous

WO1 Morris was awarded various prizes for his garden efforts at the Camp Fall Fair this year.

Clarence Bolt, our cleaner at the Depot, is on the job as usual, even after drawing a horse in the Irish Sweep.

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11 DENT COY NEWS

As usual, a large number of postings took place during the summer months. We wish those who left continued success and welcome our new-comers.

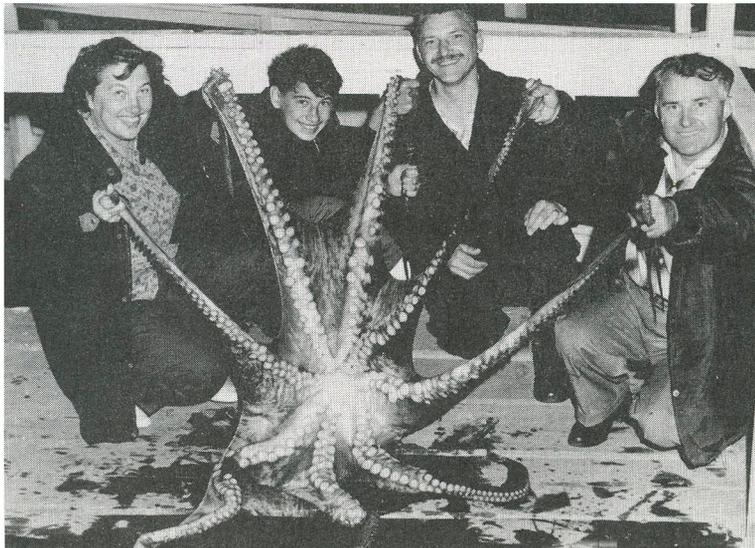
Sporting Events

Now that the World Series is over the talk has turned to curling and the fever is rising by leaps and bounds.

Personnel of No 25 Dental Clinic, Griesbach Barracks, have been authorized to form a Pistol Team and hope to compete in championship matches.

Cpl Schuh (Boots) took part in a Black Powder Shoot sponsored by the Alberta Arms and Cartridge Collectors Association. He won first place in the Pistol Event using a 1900 Webley Pistol and 2nd place in the Military Rifle Event using a 1886 Mauser.

WO 2 Powers and fishing party made the headlines during August when they caught one of the largest octopuses ever caught in the Victoria Area. The newspaper report stated that it weighed 40 pounds, but Bill Powers says that it was closer to 80. Pictured below is the "catch".



L to R: Mrs. Nick Powers, Ron Powers, Bill Powers, Nick Powers

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12 DENT COY NEWSRetirement Parties

A farewell dinner was held in Stadacona Wardroom for Capt Frank Lovely prior to his release on the 26th August. Frank has accepted a full-time teaching assignment in the Oral Surgery Department of the Dalhousie Faculty of Dentistry and next year will be enrolled for three years post-graduate training at an American University.

A second farewell party was held in honour of Sgt Bill Fougere who is retiring early in November after serving with the Corps for more than seventeen years. A great many of his friends both in and out of the Corps were on hand to wish him well as he returns to civilian life.

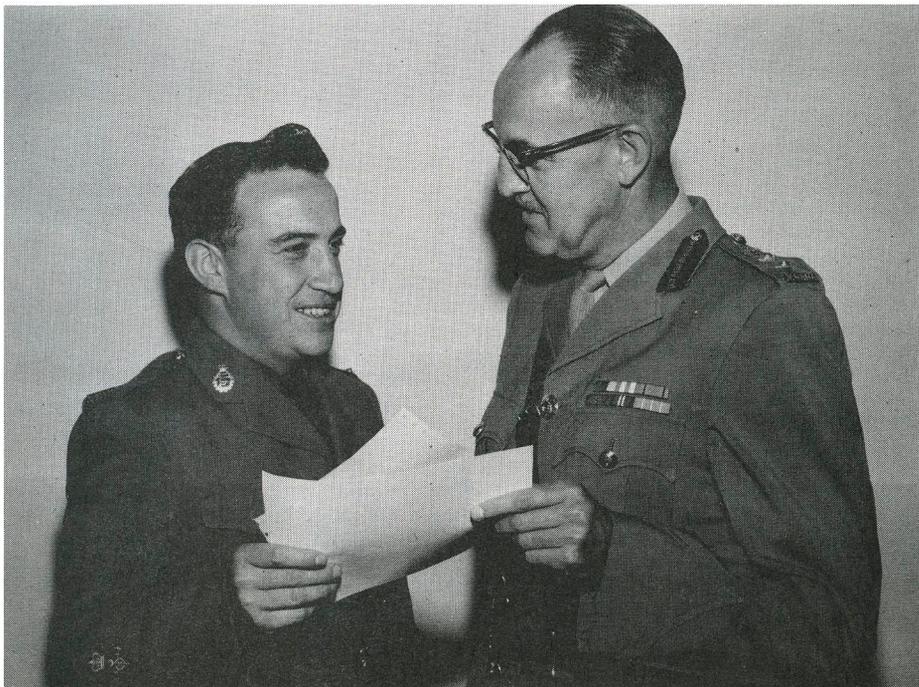
Rescue at Sea

Major ED McDermott, Principal Dental Officer aboard HMCS Bonaventure for her current European cruise, had an unscheduled experience when the ship participated in rescue operations in connection with the crash of an American aircraft over the mid-Atlantic. It will be of interest to our more senior members that the Principal Medical Officer aboard HMCS Bonaventure, W/C DO Coons, is the son of Colonel Dwight S Coons, a former Director of our Corps.

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13 DENT COY NEWSNew Member of the Corps Receives Award

Colonel AC Lemman congratulates Pte TR O'Mara (see photo below) on receiving an award from the DND Suggestion and Awards Committee. Pte O'Mara received the award and a cheque for his suggestion concerning the mounting of a .30 Caliber Browning M4 machine gun mount on a Ferret Scout Car. Formerly with RCEME in Europe, Pte O'Mara recently transferred to the RCDC and is currently undergoing training as a dental assistant at Trenton.



Duty Trips to Radar Sites

During September, Capt. DDR Girard and Sgt JRA deBlois proceeded on TD from RCAF 6 Repair Depot to RCAF Station Ramore to provide treatment at this Northern Ontario site and Capt AJJC Vachon and Cpl DB Loosley made one of their periodic trips from Camp Petawawa to RCAF Stations Falconbridge and Foymount.

On 26 Sep 62, Colonel AC Leman, Capt EW Gazo, Ssgt EMB Everett and Sgt W Olynyk flew via RCAF "Albatross" aircraft to Moosonee, Ont to inspect and provide dental services for RCAF personnel stationed at this site. Capt Gazo and Sgt Olynyk remained until 19 Oct 62 to provide further dental treatment.

Former Corps Officers Tour Europe

Dr CW McCrary, Part V Dental Officer at 7 PD London is currently on a seven-week holiday abroad. Dr WO Gardner a former Part V Dental Officer now employed on a per diem basis at RCAF Station Uplands is enjoying the sights of Europe along with a Square Dance tour group from the USA. He expects that the highlight of his tour will be to dance at the famous castle in Heidleberg, Germany.

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14 DENT COY NEWSSports

The RCDC Bowling League has commenced their season, and all teams will be in competition for the trophies held at this HQ.

Our ardent curlers are preparing for a full season in their new Curling Rink and will be out to capture the various trophies up for competition.

NCO Enrolled as Dental Student

Our best wishes for success are extended to Sgt KPH Buchholz who has been accepted in second year dentistry at the University of Manitoba.

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15 DENT COY NEWSCommanding Officer Represents DGDS at Clinic

Lt Col JG Butler was the official Corps representative at the 37th Annual Fall Clinic of the Montreal Dental Club 29 - 31 Oct 62.

Retirements

On 28 Jul 62, Lt Col and Mrs AR Smith were given a farewell dinner and social evening at St Jean on the occasion of the Colonel's retirement. This event was attended by the officers and their wives from St Jean, St Hubert and the Montreal area. The Smiths left for Prince Edward Island for a brief period of leave before the Colonel commences his call out for continuing duty at RCAF Station Summerside.

A farewell retirement party was given for Sgt Blanke by members of No 9 Clinic and QM Staff at St Jean. We wish him good luck and happiness in civilian life.

Mrs Johanna Lecompte retired for medical reasons after long and faithful service as a Part V dental assistant at the HQ Quebec Command Clinic. We trust that she will enjoy improved health in the near future and hope that she will carry many happy memories of her association with the RCDC.

### Sports

Golfing members at Coy HQ have been prime targets this season for the GOC who plays an excellent game of golf. They were not able to outplay him at the annual Seagram Trophy competition, however, Capt Harrison did outdrive all participants in the longest drive event.

Enthusiastic golfers at St Jean miss the competition of Capt Ben Parent since his posting to Goose Bay and have recently turned their talents to the bowling alleys. A combined clinic and QM team has been entered in the RCAF Station league.

Personnel at Goose Bay report that fishing wasn't too good this year, although Maj Fell was top fisherman, having made some good catches at different lakes.

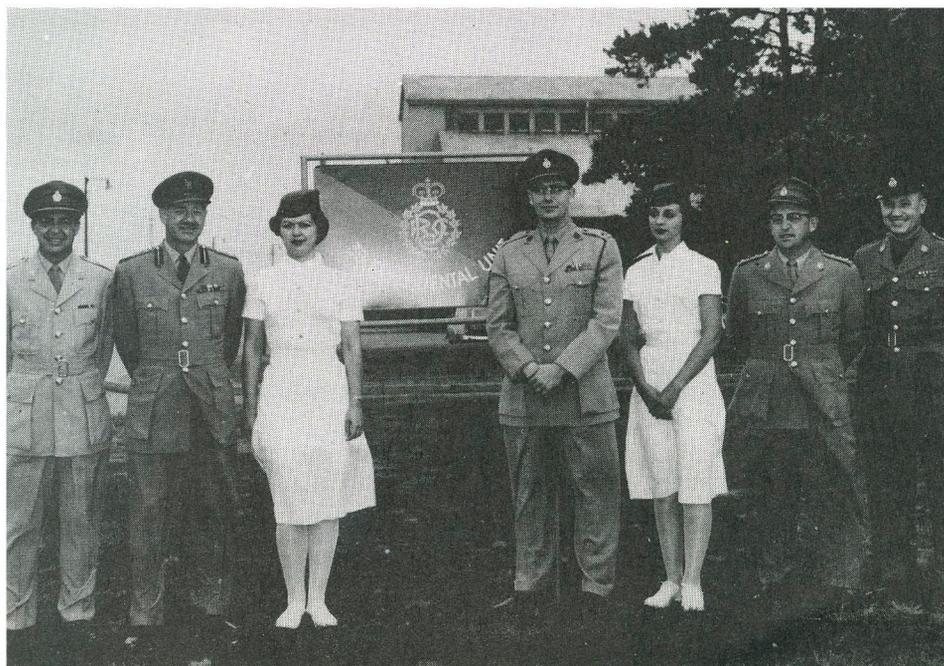
Capt Roy of RCAF Station Parent augmented his meat ration by shooting his first moose.

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### 35 FD DENT UNIT NEWS

#### DDGDS Inspects 4 Wing Clinic at Baden Soellingen, Germany

Pictured during his recent inspection tour of the Unit, is the Deputy Director General of Dental Services, Col GB Shillington with the Commanding Officer, Lt Col LG Craigie, LAW DJ Hollins, Maj WH Harrington, LAW MHC Jaeger, Capt HK Meisner and Sgt A Fox.



Sports

HQ 1 Air Division RCAF held its first annual golf tournament at Luxembourg on 11 Sep, under the direction of Lt Col Craigie, Chairman of the Golf Committee. Twenty-seven holes of golf, followed by a banquet and presentation of prizes, concluded a highly successful day for the "divot-diggers".

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4 FD DENT COY NEWSUnit on Early Fall Manoeuvres

Headquarters of 4 Fd Dent Coy and four dental sub-sections participated in the concentration of 4 Cdn Inf Bde Gp at Soltau from 5 - 19 Sep 62. In October, one sub-section manned by Capt Shaw, WO2 Gourlay and Sgt Wilkinson provided dental treatment for the brigade during a tactical exercise with the British Army on the Rhine.

Colonel Shillington Visits Brigade

Colonel GB Shillington visited the 4 CIBG area as part of his European tour and inspected the Coy 11 - 13 Jul. He interviewed all RCDC personnel and visited the static clinics. He and Mrs Shillington were guests of honour at a cocktail and dinner party held in the HQ Officers' Mess on 12 Jul. The following day at the close of his inspection the Colonel was entertained by the Coy NCOs at Fort Chambly.

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CBUME NEWSMedals Parade

A Medals Parade was held on 30 July for the more recent members of the Detachment and UNEF Medals were presented to Capt Conrad, Sgt Dancer and Cpl Moran.

Trips and Visits

During the month of July, Capt Claude Arpin was fortunate enough to spend an enjoyable 14-day leave in Italy and Ssgt Earl Schell headed for the cool mountains at Beirut, Lebanon for seven days.

Sports and Recreation

Capt Conrad (RCDC) and Capt Wallace (RC Sigs) were the winners of the recent bridge tournament held by the Canadian Contingent. Their victory established the only Canadian "first" in any UNEF competition held so far and we are particularly proud that a member of the RCDC shares this honour.

As manager of the CBUME table tennis team, Major Kelland led his doubles team to the finals in the UNEF competition. The Canadians placed second to the first prize winners - the Swedish team.

The Canadian Contingent softball league got underway on 16th September. At the opening game our Capt Conrad was the outstanding first baseman on the combined HQ and Ordnance Coy team. Unfortunately, "Cepeda's understudy" fractured his third finger right hand during a practise game on 22nd September and had to retire from the club. There was however one compensation - Capt Conrad was granted a three-week leave in Canada while his finger was healing.

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### MILITIA IN THE NEWS

#### Announcement - General Efficiency Awards - 1962

No 60 Dental Unit, Canadian Army (Militia), with headquarters at Edmonton, Alberta, competing with militia dental units across Canada for general efficiency during training, is the winner of two major trophies for 1962.

Commanded by Lt-Col SG Geldart, No 60 Dental Unit received the Moore Trophy as the most efficient unit and the Saskatchewan Dental Association Memorial Trophy as the most improved unit during the training year.

No 61 Dental Unit, Vancouver, BC, commanded by Lt-Col PL Rondeau, was awarded the Trelford Trophy for placing second in general efficiency.

No 57 Dental Unit, Winnipeg, Man, commanded by Lt-Col MJ Snidal, received an honorable mention.

Selection of trophy winners is made following an annual inspection of all participating militia dental units by an officer from the office of the Director General of Dental Services, Army Headquarters, Ottawa.

Dr Stephen A Moore, London, Ont, first honorary lieutenant colonel of the Royal Canadian Dental Corps, donated the trophy bearing his name.

To perpetuate the name of Lt-Col WG Trelford, VD, who commanded No 1 Divisional Dental Company, Canadian Dental Corps, officers of the unit donated the Trelford Trophy to be presented to the militia unit standing second in general efficiency competition.

No 1 Divisional Dental Company, CDC, was the first dental unit to proceed overseas during the Second World War.

#### RCDC Association Annual Meeting

The fourteenth Annual Meeting of the Royal Canadian Dental Corps Association was held at The RCDC School during the period 5-6 Oct. This meeting was preceded by an executive meeting of the Association on 4 Oct. Those attending were as follows:

#### Executive

Honorary President	-	Brig	EM Wansbrough
Past President	-	Lt Col	NL Simon
President	-	Lt Col	JS Goodfellow
President-Elect	-	Lt Col	WG Campbell
1st Vice President	-	Lt Col	GL Ramsay
2nd Vice President	-	Lt Col	CE Woods
Secretary	-	Col	CB Climo

Advisory Staff

ADDS Eastern Command - Col JE Merritt  
 ADDS Western Command - Col TJ Cooke

Unit Representatives

50 Dent Unit - Lt Col JE Hallett  
 51 Dent Unit - Lt Col HF Bonnell  
 54 Dent Unit - Maj CG Hunt  
 55 Dent Unit - Lt Col AJ Harris  
 55 Dent Unit - Maj JD McLean  
 56 Dent Unit - Lt Col AZ Henry  
 57 Dent Unit - Lt Col MJ Snidal  
 58 Dent Unit - Lt Col A Mintz  
 60 Dent Unit - Lt Col SG Geldart  
 60 Dent Unit - Maj AC Thompson  
 61 Dent Unit - Lt Col PL Rondeau

Guests

Col JF Edgecombe - Colonel Commandant of the RCDC  
 Brig HET Doucet - Deputy Adjutant-General  
 Col IAL Millar - Directorate of Dental Services  
 Lt Col WH Salter - Directorate of Militia and Cadets

The Annual RCDC Association Dinner was held at the Canadian Forces Medical Service Training Centre Officers' Mess on 4 Oct. Brig KM Baird, Col CE Purdy, the officers of the RCDC School, and officers on the Capt-Maj Qualifying Course attended as well as the Association members and their guests.

"Edgecombe Award" and "Hugh McLaren Memorial" to be Created

The RCDC Association has announced that Col JF Edgecombe, Colonel Commandant of the RCDC has donated funds for the "Edgecombe Award" to be offered annually to the Militia Unit judged to have done the most to promote the work of the RCDC Association during the year.

It was also announced that a suitably-engraved gavel, to be used at all future meetings, will be purchased in memory of the late Colonel Hugh R McLaren who, in addition to his long and active association with the RCDC Militia, served as Treasurer of the RCDC Association for many years.

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