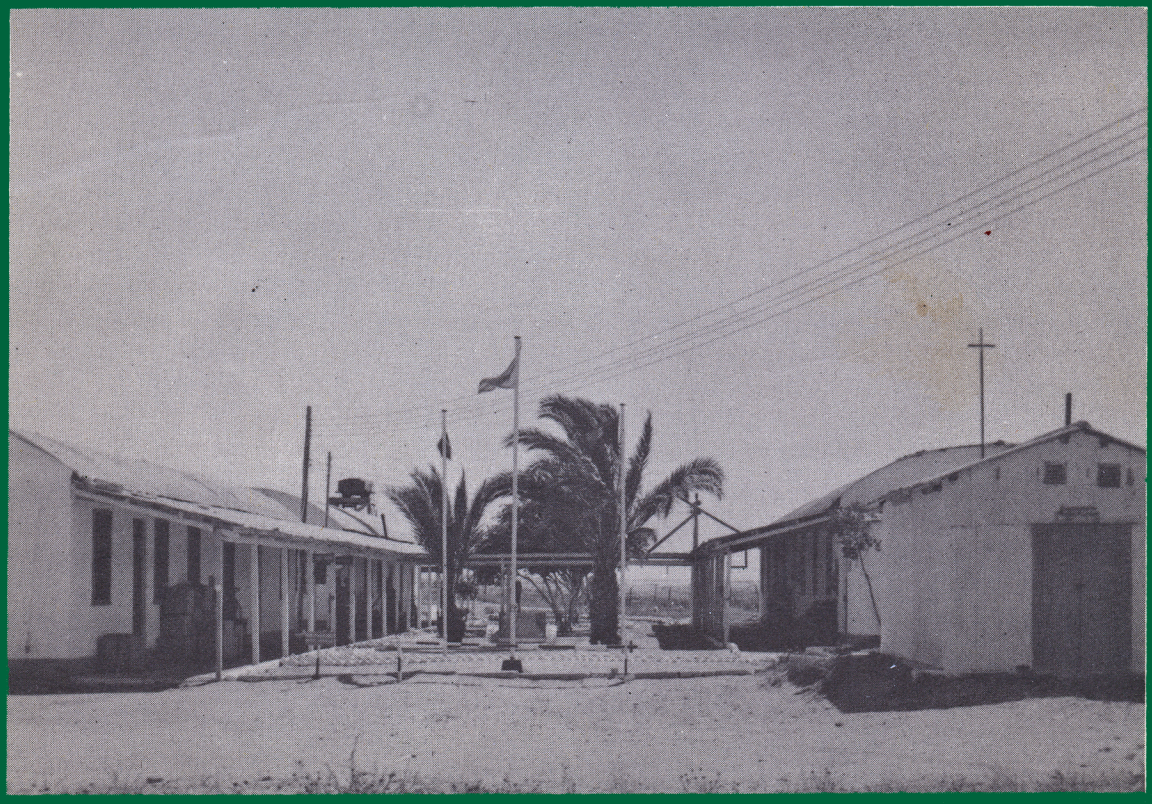
The ROYAL CANADIAN DENTAL CORPS Quarterly



VOLUME 3 NUMBER 1 APRIL 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
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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,
Army Headquarters,
Ottawa, Ontario.

Cover Photo - Canadian Dental Detachment Headquarters, Canadian Base Units Middle East

EDITORIAL

The Monthly Letter of November 1961 published by The Royal Bank of Canada has this to say about time:

> "Time is the raw material of life. Every day unwraps itself like a gift, bringing us the opportunity to spin a fabric of health, pleasure, and content, and to evolve into something better than we are at its beginning."
>
> The gift of time brings no magic with it. It is only made available. We must study how to get the most out of the passing days."
>
> "This learning is an individual thing, but there are some basic tools and ideas of management that can help us. Here are three undeniable facts: (1) Time can be measured, therefore apportioned; (2) time is always passing, and it never returns; (3) time can be wasted, just as we waste materials, money and energy."
>
> "To us as individuals time is the essence of our being; to the clock it is a measured interval; to the nurse it is a pulse record; to the engineer of conservation dams it is a sedimentation rate. A philospher may think of it as the past increasing by diminution of the future."

A dentist may think of time in relation to the various operations to be performed for his patients, how many patients he can accommodate in his working day and the productivity achieved in his office over a given period. He may consider that, in his busy practice, he has reached his maximum productivity, yet motion and time studies might reveal otherwise. Incomplete utilization of his auxiliary's services and wasted motion through poor location of his equipment can rob him of considerable time and energy.

The dental assistant should function as an additional pair of hands for the dentist but, to act in this capacity, must be beside the chair helping in every possible manner for as long as required. The position of equipment, instruments and supplies is of paramount importance in reducing waste motion. Why should it be necessary for the assistant to walk around the chair to the cabinet to mix cement when materials and a table for this purpose can be close at hand? Or why should the dentist turn around to obtain an instrument in the cabinet when with a little planning it can be made available on a tray close by?

A re-organization in some dental offices undoubtedly would lead to greater productivity and far less fatigue for both dentist and assistant. Motion and time studies have produced remarkable results in industry and there is every reason to believe that a broad, new vision of dental practice is being unfolded through application of similar studies in the dental office. An extension of the services that can be rendered by trained auxiliaries would complement this picture and will require considerable investigation. In the latter instance, the RCDC has already conducted one study and confidently expects to play its part in developing methods for, and promoting the more efficient use of time and energy in dental practice.

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CANADIAN DENTAL DETACHMENT
CANADIAN BASE UNITS MIDDLE EAST

Major EJ Small CD BA BSc DDS

Since the Canadian Dental Detachment CBUME is part of the United Nations Emergency Force stationed in the Gaza Strip, it may be pertinent to recapitulate the series of events which led to the formation of UNEF itself.

PALESTINE

Palestine is a narrow strip of land on the extreme eastern shore of the Mediterranean Sea, bounded from north to south by Lebanon, Syria, Jordan and Egypt. In the southwest it is separated from the sea by a finger-like projection thirty miles long by five miles wide under Egyptian administration known as the Gaza Strip.

Before World War I Palestine contained both Jewish and Arab settlements as well as wandering Bedouin tribes, and was part of the Ottoman (Turkish) Empire. After the defeat of Germany and its satellites by the Allies, The League of Nations granted Great Britain a mandate to govern and administer the territory. One of the terms of the mandate was the implementation of the "Balfour Agreement", the main tenet of which was the establishment of a national home for the Jews in Palestine, with a guarantee of civil and religious rights for the non-Jewish communities.

Throughout the years there had always been some immigration of European Jews to Palestine, but since the late thirties and especially after World War II this immigration increased tremendously, and was followed by disturbances between the Arab and Jewish populations.

As more Jewish immigrants poured in conditions worsened, and as a result of charges and counter-charges between the Jewish Agency for Palestine and the Arab Higher Committee, a United Nations Committee was formed for the purpose of investigating and reporting on all matters which in its opinion would lead to peace in the area.

PARTITION PLAN

As a result of the findings of this committee the UN General Assembly adopted the Partition Plan, one of three plans for the attainment of peace. This plan called for the division of Palestine into an Arab state and a Jewish state, the withdrawal of the British Armed Forces, and the termination of the British mandate.

Representatives of all Arab states in the UN denounced the plan, and stated that not only would they resist partition, but would refuse to recognize the UN resolution in this respect.

On 14 May 1948 Great Britain withdrew her troops, relinquished her mandate, and a Jewish state was proclaimed under the name of Israel.

OUTBREAK OF HOSTILITIES

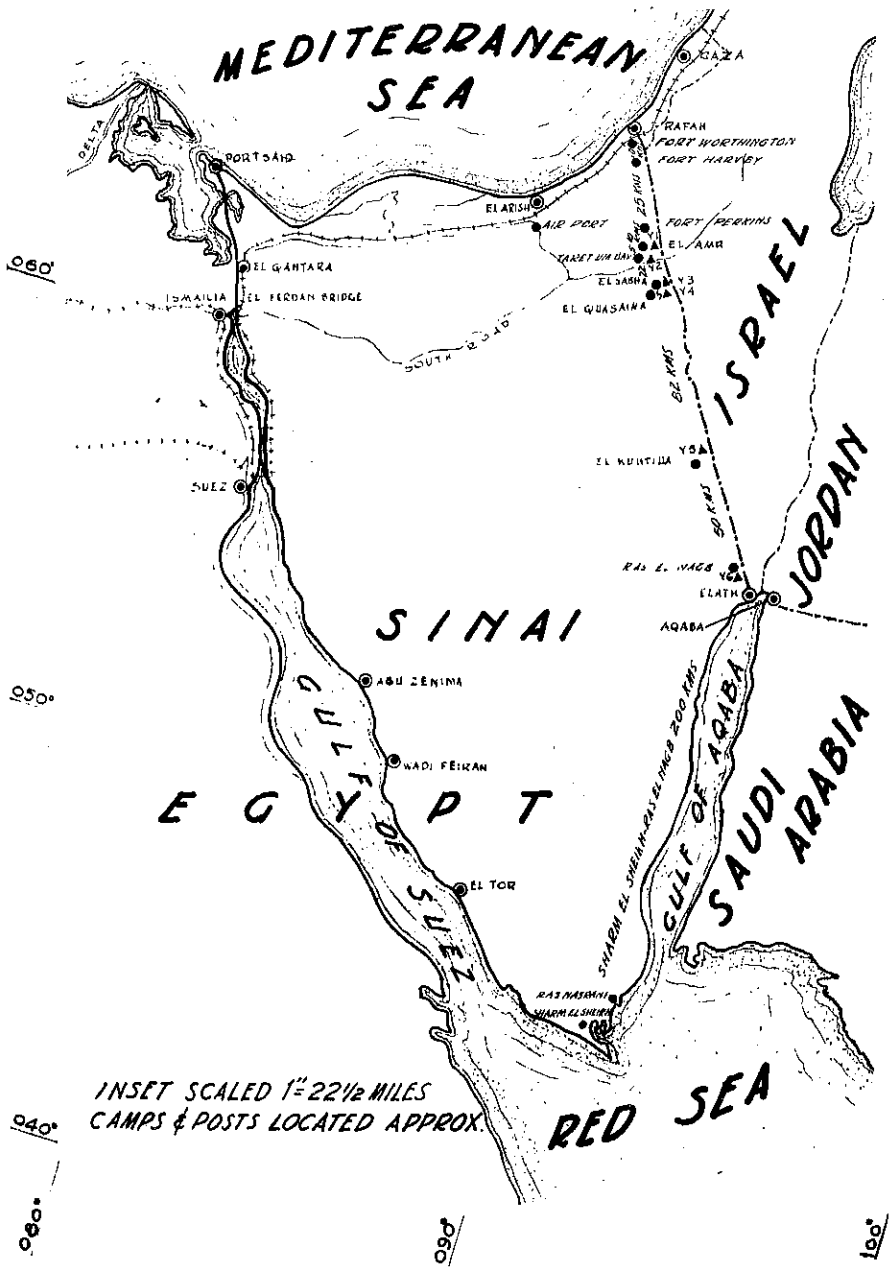
The next day the Arab states instituted armed action in Palestine, and fighting continued until 18 July, when the Security Council of the UN succeeded in bringing about a cease-fire. This proved to be but a temporary respite, and

large-scale fighting broke out again between the Israelis and Egyptians in the Negev. The Security Council repeatedly called for a truce, and finally succeeded in arranging a General Armistice Agreement between Israel and Egypt on 24 Feb 1949, soon followed by further armistice agreements with Lebanon, Jordan, and Syria.

Unfortunately the Armistice Agreement was followed by border incidents which rapidly increased in severity and numbers, culminating in October 1956 with a full-scale invasion of the Sinai by Israeli troops.

FORMATION OF UNEF

As a result of military action by French and British troops, the UN General Assembly held a meeting and adopted a proposal put forward jointly by Canada, Columbia and Norway calling for an emergency international force to secure and supervise the cessation of hostilities between Egypt and Israel. This resolution also appointed "on an emergency basis" the Chief of Staff of the UN Truce Supervisory Organization, Major-General ELM Burns, as Chief of the Command.



The Sinai Peninsula

On 15 Nov 1956 the first UNEF troops, a Danish unit, arrived in Abu Suweir, near Ismailia, and were soon followed by Columbians, Yugoslavs, Indians, Swedes and Canadians.

As Israeli forces withdrew, the main body of UN troops took up positions in all centers of population and camps in the Gaza Strip. HQ UNEF was set up in the town of Gaza, and reconnaissance units deployed along the Israeli-Egyptian frontier from Rafah to the Gulf of Aqaba.

PALESTINIAN REFUGEES

Apart from the question of territorial modifications, relations between Egypt and Israel are aggravated by the problem of the Palestinian refugees. There are some 260,000 of these refugees in the Gaza Strip alone, and the question of their disposal has lead to sharply opposing views between the Arab states and Israel. The former affirm that Israel refuses to comply with UN General Assembly resolutions according to which, they hold, the refugees can choose between repatriation and compensation. Furthermore, they say, until this right of choice is admitted by Israel it will be impossible to implement other resolutions calling for the absorption of the refugees and their integration into the economic life of the Middle East.

Israel's stand is that the refugees were created by the Arab states as a direct result of their military action against Israel in 1948, and that for internal security and political stability the refugees cannot be re-admitted to the present state of Israel. In addition, they argue that the best interests of both the refugees and the Arab states themselves would be served by their relocation in the Arab states. Israel has expressed its willingness to discuss the question of compensation.

In the meantime the refugees are assisted by the free provision of food, shelter and clothing by the United Nations Relief and Works Agency (UNRWA), which is attempting also to rehabilitate and educate them.

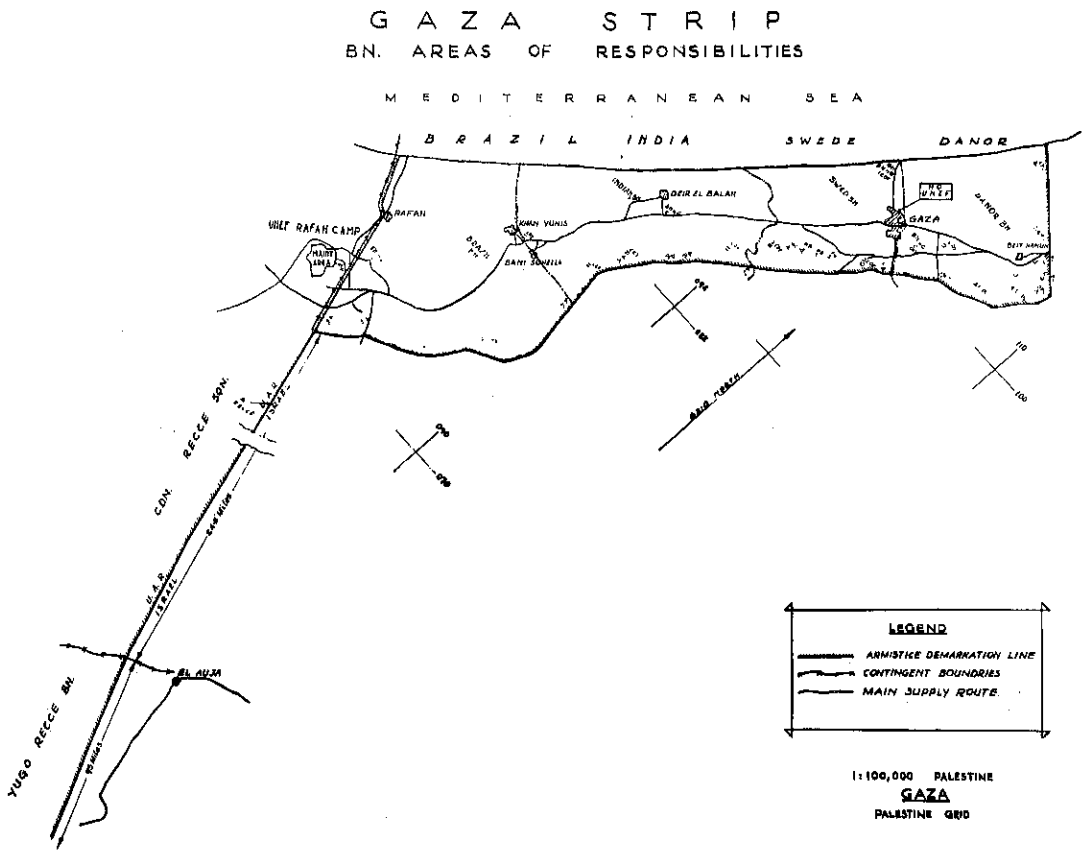
THE GAZA STRIP AND THE ADL

The General Armistice Agreement between Egypt and Israel fixes the boundary between Israel and the Gaza Strip by a line known as the Armistice Demarcation Line or ADL. For the most part the ADL takes the form of a three-foot ditch. Along its 35 miles are 73 UNEF observation posts which are manned during daylight by two soldiers with binoculars. At night, patrols move by foot along their sector of the ADL keeping in contact with their units by two-way radio.

In order to limit unauthorized crossings of the ADL, a regulation is in force restricting the movements of inhabitants of the Strip to a distance of 500 meters from the ADL by night and 50 meters by day. If they are working the land, they may work right up to the line.

The Gaza Strip itself covers an area of 200 square miles, running in a NE - SW direction from the town of Gaza to Rafah. Within it are troops of the various national contingents of UNEF with the exception of the Yugoslav Reconnaissance Battalion which is stationed at El Arish, about three miles from 115 ATU RCAF. Component troops have been allotted certain areas for which they are responsible. The Swedish Bn is entrusted with the task of guarding HQ UNEF, Gaza, and a small portion of the ADL. The Danor (mixed Danish and Norwegian) Bn is responsible for some eleven miles of the ADL from the Mediterranean Sea to the

old Gaza-Beersheba road. Between the Danor Bn and the Indian Bn are three miles patrolled by the Swedish Bn. The Indian Bn has been assigned a sector from the town of Deir el Balah to the town of Khan Unis, including the Wadi Gaza, scene of bitter fighting in the recent conflict. The southernmost part of the ADL is the responsibility of the Brazilian. This area extends from Khan Unis to Rafah and borders on the Sinai.



THE INTERNATIONAL FRONTIER

The International Frontier, or IF, begins on the Mediterranean Sea and for the first seven miles it separates Egypt from the Gaza Strip. Subsequently, it passes through Rafah, joins the ADL and continues straight through for almost 120 miles to the Gulf of Aqaba, forming a boundary between Israel and the Negev on the one side, and Egypt and the Sinai on the other.

The northern sector of the IF is guarded by the Canadian Reconnaissance Squadron with Headquarters in Camp Rafah and two outposts twenty-five miles apart on the IF. From these three locations mobile patrols are sent out daily at irregular intervals, the sensitive areas being patrolled by ground patrols, the other sectors by air reconnaissance from 115 ATU RCAF. The southern sector is the responsibility of the Yugoslav Reconnaissance Bn.

CAMP RAFAH

Camp Rafah is situated near the junction of the ADL and the IF and covers an area of 260 acres of flat sandy desert dotted by whitewashed buildings. The outstanding feature of the area is an ochre-coloured water tower, a gathering place

for Bedouin with their camels and donkeys. The camp is surrounded by five miles of barbed wire fence illuminated at night by sixteen searchlights mounted in towers and placed intervisably from one another. The perimeter fence is constantly patrolled by armed guards with dogs.

The bulk of Canadian officers and men in UNEF are stationed in Camp Rafah with the servicing and supporting units of the Force. These troops include the UNEF Ordnance Company (RCOC), UNEF Engineer Company (RCE), 56 Canadian Infantry Workshop (RCEME), 56 Canadian Transport Company (RCASC), and 56 Canadian Signal Squadron (RCCS). The housekeeping detachments of Canadian Base Units Middle East form part of Headquarters Company, and consist of Public Relations, Chaplains, Legal, Welfare, Postal, Pay, Medical and Dental Detachments.

DENTAL SERVICES IN UNEF

At the end of January 1962 the total strength of UNEF was approximately 5,150, made of 550 Brazilians, 700 Danes, 600 Norwegians, 400 Swedes, 700 Yugoslavs, 1000 Canadians and 1200 Indians, under command of Lt-Gen PS Gyani of the Indian Army.

Dental care for the Force is provided by 23 officers and men, each national contingent, with the exception of the Indian, having its own dental officer and assistant. Personnel of the Indian contingent receive treatment from the Canadian Dental Detachment. Overall direction and supervision of the six dental detachments has been assigned to the Senior Dental Staff Officer (SDSO), the OIC Cdn Dent Det. He is responsible to the Commander for all matters relating to dental health in UNEF including the planning for dental services and the procurement, issue and control of all dental supplies and equipment.

In addition to military personnel of UNEF, dental officers provide comprehensive treatment for the International Staff (civilians) of UNEF and UNRWA and their dependents, the latter on a re-payment basis. Local employees, Bedouin, Palestinians and Egyptians are treated in an emergency without charge.

With the changing status of the Force from a short-time Emergency Force to one of a semi-permanent nature, more thought was given to the improvement of dental facilities. Field equipment originally brought in with dental officers from various countries has been gradually replaced by UN-purchased supplies and static equipment. These items include regular dental chairs, SSW engines, rubber mats and saliva ejectors and each clinic received an X-ray machine. Improved facilities have contributed greatly to the dental service in UNEF as evidenced by treatment returns during the period Jul 61 to Jan 62 inclusive when dental officers treated an average of 1185.8 patients and performed 1990 operations per month.

There are two laboratory sections in UNEF; a small one for the Yugo Recce Bn, and a larger, more fully equipped laboratory in the Cdn Dent Det to provide prosthetic services for all other contingents. It is interesting to note that initially the Yugo dental officer regularly used more dental gold in one month than the Canadian dental laboratory used in six. However, a new policy was instituted in Jul 61 which authorized both laboratories to be issued gold on a pro rata basis according to the number of personnel served. These laboratories provide all types of laboratory services with the exception of chrome-cobalt castings.

CANADIAN DENTAL DETACHMENT CBUME

The Cdn Dent Det CBUME is unique among the detachments of the RCDC in that it may be called upon to treat soldiers of seven different nations along with civilian personnel from widely separated parts of the world.

There are ten RCDC personnel in the detachment consisting of three dental officers and three assistants, two dental technicians (lab), one dental storeman and one clerk administrative.

Front Row: L to R: Sgt Boulanger, Sgt Storms, Sgt Strub

Back Row: L to R: Sgt Dancer, Capt Arpin, Major Small, Capt Bunt, Ssgt Schell

Not Present: Cpl Moran and Sgt Drawe

Working hours are from 0700 to 1315 hours daily except Sunday, winter and summer. Dental sick parade for Canadian personnel is from 0700 hrs to 0730 hrs, and for Indian personnel from 1030 to 1100 hours. The remainder of the working day is taken up by appointments. Despite the widespread but erroneous opinion that the Cdn Dent Det CBUME has little or nothing to do, it has been determined that during the period from Jul 61 to Jan 62 the detachment averaged 482.5 patients and performed 750.5 operations per month and in many cases, patients were encouraged to defer treatment until they arrived in the Middle East. While it is true that the waiting period for an appointment is rarely more than two weeks, it is definitely incorrect to assume that the dental staff are on a protracted holiday.

For a description of the clinic and its environs, and a general summary of the many opportunities for travel in this area, the reader is referred to the excellent comprehensive and informative article by Cpl CC Eastwood in the Jul 60 issue of the RCDC Quarterly. There have been some notable improvements since then, such as the complete renovation of the stores section and the laboratory including installation of a tile floor and new benches, new tile flooring in the men's quarters and the addition of high-speed units to the clinic. However, Camp Rafah itself hasn't changed. There is still the searing heat of midday and the raw cold of the desert night; still the barbed wire fences and the never-ending sand stretching to the horizon. Postings to faraway places are a normal part of service life, and must be accepted as such. There are few indeed who would regard this as a highly desirable posting, and fewer still who would volunteer for a second tour but actually, except for the separation from home and family, it is not intolerable. Opportunities for travel are good, the weather is generally excellent, and as long as one keeps one's leisure hours occupied, the year passes rather quickly.

CONCLUSION

Generally speaking, Canadians like other troops serving in UNEF are conscious that they are part of a Force specifically designed to prevent war, not to wage it. Irksome as duty in the Middle East may be at times and filled as it is with petty annoyances, the fact remains that without the Force this area would

not long remain quiet and could well become a trouble spot leading to a general conflict. As long as the underlying problems remain unsolved there will be a need for UNEF to reduce border incidents and prevent violations of armistice agreements. Canadian soldiers wearing the blue beret are justifiably proud of the role they are playing in maintaining the peace and helping in some small way to keep order in this troubled world.

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SEVERE HYPOTENSION ASSOCIATED WITH A XYLOCAINE INJECTION

REPORT OF A CASE

Capt FW Lovely, DDS

The patient, a 30-year old petty officer, was referred to Canadian Forces Hospital Halifax because of a hyperactive gag reflex. He had vomited on two previous attempts to position an intra-oral film packet for an X-ray view of the lower left 7-8 area, prior to the extraction of these teeth.

On arrival at CFH Halifax the patient had an extra-oral radiograph taken and an examination was made of the area. A brief history was obtained at this time and the patient stated that he had received a xylocaine injection previously for the removal of a wart on his foot with no untoward effects. He stated that he had developed a rash when being treated with penicillin for a prolonged period a few years previously. The patient was of normal weight and appeared healthy. He gave no further pertinent medical history.

During the systematic questioning of this patient it was noticed that he was extremely apprehensive. He was given an appointment for the next morning for 0900 hrs.

On reporting to the Dental Clinic the following morning the patient was given Meperidine 75 mg. and Promethazine 50 mg., put to bed on the ward and immediately went to sleep. One hour later he was brought to the Dental Clinic.

The patient was placed in the chair in the horizontal position. Approximately 1 cc of xylocaine 2% containing 1/100,000 adrenalin was administered as a mandibular block. The needle was withdrawn and inserted for a long buccal injection and approximately 0.25 cc was injected. Immediately the patient stated that he was fainting.

The dental nurse promptly started administering oxygen at the rate of nine litres per minute. The patient was pale at this time but not cyanosed, his respiration had ceased and his radial pulse was undetectable. Oxygen was continued and closed-chest heart massage sternal pressure was started using the method described in the article on "Cardiac Massage" published in the April 1961 edition of the RCDC Quarterly.

A passing nurse was summoned and instructed to load a dental syringe with a 1 cc carpule of 1/1000 adrenalin, which was in the emergency tray. This was given i.m. in the arm. Heart massage was continued and after approximately one minute the radial pulse became detectable. The pulse was rapid and very thready at this stage and the patient was showing cyanosis around his ears, neck, fingers and toes.

About five minutes later the patient started to breathe on his own but during the next ten minutes his respirations continued to halt whenever artificial respiration by the thoracic pressure method was discontinued. The patient was given 20 mg. Benadryl i.m. at this time.

Once pulse and respiration returned to normal, the chief anesthetist was called from the operating theatre. His appraisal of the immediate situation was as follows: "I saw the patient a few minutes after the episode and at that time he had moderate cyanosis of the fingers and toenail beds although he was breathing well and receiving oxygen by mask. His blood pressure at that time was 110/80, pulse 80/min. He was fully conscious, well orientated, bright and cooperative. In a further few minutes the cyanosis was not as evident. It is impossible to say for certain whether this was an actual case of cardiac arrest or a vaso-vagal syncope." Subsequent to this appraisal the anesthetist called the Chief of Medicine, who examined the patient, advised us to continue ventilating him with oxygen and made arrangements to move him to a private cabin, where an ECG would be taken.

The report of the Chief of Medicine on the ECGs, and his opinion of the situation is quoted hereunder: "When seen by me about 20 minutes after the incident started, the patient was pale but not cyanosed and he was normally orientated and responding appropriately to questions. I gathered that there was no confusion on regaining consciousness. When put to bed, his blood pressure was 110/80 and he felt reasonably well though weak and shaky. An ECG was taken about 40 minutes after the incident and was abnormal showing a general low amplitude T-wave pattern with an inverted T2, T AVF and a biphasic T in V4-V6. The patient was kept in bed and about three hours later a second ECG was recorded. This was entirely normal.

My interpretation of the incident is that the patient became profoundly hypotensive and that the transient ECG changes can be attributed to a period of moderately severe myocardial ischaemia associated with hypotension. I doubt if the heart actually stopped because his recovery of full consciousness was apparently rapid when he responded to treatment. However, with efficient closed-chest heart massage, the circulation including the cerebral circulation can be efficiently maintained and because of the prompt and most efficient treatment he received his circulation was probably never seriously deficient.

It is of interest that I investigated this man four years previously because of a tendency to "faint" on parade and after any mildly traumatic experience. After full investigation including ECG, I decided he was a hypotensive man with lack of good postural vascular tone. No doubt this is relevant to the recent incident."

It was decided two days later that the patient's condition was suitable for a general anesthetic and he was booked for the operating theatre for the following day. The anesthetist's report of this anesthesia stated:

"Pre-induction BP 105/80, pulse 80 and regular. The patient was induced with 300 mg. of sodium pentothal followed by 50 mg. of succinylcholine and 2.0 mg. of syncurine. Intubation was carried out with a number 40 cuffed endotracheal tube and anesthesia was maintained with Nitrous Oxide 5 litres per minute, Oxygen 3 litres per minute and 0.25% Fluothane under controlled respirations.

During the operative procedure the blood pressure gradually rose to 140/85 at the end of the procedure and the patient awakened quickly and was talking intelligently before leaving the theatre. He had an uneventful recovery-room stay. When seen later in the afternoon his condition was satisfactory."

Comments

This is a frightening experience, so frightening in fact that one does not think clearly enough to systematically search for equipment, medications or knowledge. These aids must be readily available at all times. It is also worth noting that a dental officer cannot cope successfully with such a situation single-handed. He and his assistant must be thoroughly familiar with the procedures to be carried out when a cardiac arrest is first detected - Seconds Count.

It has been stated in the literature that time spent in giving adrenalin is valuable time wasted, that one should get busy with closed chest cardiac massage and artificial respiration. The brain, heart and other vital tissues will not suffer damage if perfused with well oxygenated blood and it has been proven that this is possible with an arrested heart, simply by aiding it with closed-chest massage and maintaining respiration with 100% oxygen.

There are several things that could have been done differently. For example, the adrenalin might have been injected in the root of the tongue to permit speedier absorption. In this particular case Benadryl was given perhaps because of repeated discussions of allergic reactions but in any event, the patient is alive, unimpaired and attending lectures today. He could well not have been. These hazards don't always "happen to the other fellow". They can happen in any dental clinic and the patient's life depends upon our knowledge, ability, and equipment.

Conclusion

To cope with such a situation in a dental clinic, the following essentials are mandatory:

1. A thorough knowledge by all the staff of how to deal with the situation viz, the knowledge and ability to administer closed-chest cardiac massage, the ability to maintain respiration by an oxygen bag, mouth to mouth resuscitation or thoracic pressure and the knowledge of how to administer appropriate medications.

2. 100% oxygen, available, operating, and in an accessible position.

3. A tray with emergency drugs and syringes, handy and ready to use within seconds.

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Case Report by Major JVP Chatwin

A 45 year old white male was admitted for dental clearance. He had a history of chronic necrotic gingivitis. Following operation he developed a clinical and laboratory case of acute necrotic gingivitis with widespread osteitis of the exposed alveolar ridges. Bone sequestration occurred. Penicillin was not effective but tetracycline did control the condition. Hospitalization lasted 13 days. This case is interesting for two reasons: (a) It is the first case seen in five years here with N.G. following dental clearance and (b) Penicillin which is specific and dramatic in the control of this infection did not work. It is the first case requiring tetracycline treated at this clinic.

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A PRACTICAL APPROACH TO THE DENTAL EMERGENCY

Major JVP Chatwin, DDS
Surg-Capt MH Little, CD MD

True emergencies are relatively rare across Canada during the course of a year and one tends to depreciate the potential risk. In the hustle of a busy practice the dentist subconsciously depends on outside help from his medical confreres, fire department or the box of "Assorted Emergency Cartridges" supplied by one of the manufacturers. In the heat of an emergency, even in clinics where adequate emergency kits exist, few will be able to recall with certainty, how much of which drug to use where, in any specific case. To clarify this problem for the clinics here, a Card (Fig. 1) has been produced, which lists the procedures. Drugs, dosages and condition are in large type and in contrasting colour. This card is hung in the operating clinics so that the dentist does not have to depend on memory if an emergency should arise. Fig. 2 details the action, use and method of injection of those drugs incorporated in the Royal Canadian Dental Corps Assorted Emergency Cartridges' issue.

The contents of the emergency kit developed here which are all standard medical items are as follows:

Sodium Pentothal, 0.5 gms.	2 vials
Adrenalin Chloride, 30 cc	1 vial
Benadryl Hydrochloride, 10 cc	1 vial
Neo-synephrine, 0.2%	2-2 cc vials
Nitro-glycerin 1/100 gr (0.6 mg)	100 tabs
Amyl Nitrite	12 amps
Aromatic Ammonia	12 amps
Injection water (20 cc)	2 vials
Syringe, 20 cc - 1	No 19 Needles - 2
Syringe, 5 cc - 1	No 23 Needles - 2
Rubber tubing for tourniquet	1 yard
Airway	1
Oxygen apparatus	1
Sphygmomanometer	1

PHARMACOLOGY [1,2]

PENTOTHAL

Action - Pentothal is an ultra short acting hypnotic, one of the barbiturate group. It is a respiratory depressant.

PENTOTHAL (cont'd)

Preparation

a. Dissolve powder with 5-10 cc of sterile water.
b. Transfer back to 20 cc water vial for correct dilution.

Induction - Moderately slow. Give pentothal intermittently in small enough doses to bring the patient to the desired level without appreciable respiratory depression. The absence of reaction to the "pinch test" is a fairly reliable indication that sufficient pentothal has been given. This will minimize the possibility of overdosage. When laryngospasm occurs moderate adduction of the vocal cords may be recognized by a high pitched "crowing" during inspiration. Early recognition and treatment of these causes of stridor or "crowing" will usually prevent the development of severe or true laryngospasm. Careful aspiration to remove any mucous or other substance stimulating the cords is often all that is necessary. Keep the lungs well ventilated with air or oxygen. It is essential that adequate oxygenation is obtained. It is important to maintain airway and have suction machine available.

Signs of Induction

a. Eyes - will show the pupils dilating at first then contracting.
b. Pulse - remains normal or soon returns to normal after a slight increase.
c. BP - a moderate but transient fall is typical.
d. Muscle Tone - moderate relation follows after a lag of about 30 seconds. The tone of the jaw muscles is a fairly reliable index.
e. Respiration - there is a decrease in the amplitude of respiration.

Deposits of pentothal outside the vein - In a few cases there have been severe reactions to this treatment. Induration soreness, lasting several hours to several weeks. Intra-arterial injections usually cause arterial spasm, manifested by blanching of the skin over the distribution of the vessels and its branches to the site of injection. This may be accompanied by thrombosis of the major vessel. If the patient is conscious he will complain at once of a burning sensation followed by severe pain radiating below the site of injection. Stop the injection. Avoid inadvertent intra-arterial injections by aspirating before injection.

EPINEPHRINE (ADRENALIN CHLORIDE)

Action - It is the active principal of the adrenal medulla. It is prepared synthetically, and is not effective by mouth because it is destroyed by the gastro intestinal juices. It increases the blood pressure through direct myocardial stimulation, increases the heart rate and the peripheral vasoconstriction of the finer arterioles. It has a direct stimulating effect on the cardiac muscle and the conduction tissue. It is used in the treatment of allergic conditions including angioneurotic edema, and acute anaphylactoid reactions. The drug is used by injection for cardiac or circulatory failure and also is the drug of choice in serious immediate allergic reactions. Contra-indications to its use include cerebral arteriosclerosis, hypertension and shock.

Method - Intramuscular injections with brisk massage at the site of injection will hasten the action of the drug. When used by intracardiac injection the dose is 1 cc of the stock solution.

BENADRYL HCl

Action - Benadryl is used successfully as an antihistaminic agent in various allergic entities and has been employed to a lesser extent as an antispasmodic. It is effective parenterally in severe angioneurotic edema and certain drug reactions, eg, penicillin, insulin. Satisfactory results have been obtained in acute asthmatic attacks.

Method - May be administered intravenously or intramuscularly but the intravenous route is preferred in urgent conditions dealt with here. Prompt response is desired in combating the allergic reactions occasionally encountered. Intramuscular injections of benadryl may cause local tenderness, induration and erythema. Parenteral therapy is discontinued as soon as a substantial reduction in the severity has been accomplished. There is no evidence of delayed or cumulative action, side effects or incompatability to benadryl.

NEO-SYNEPHRINE HCL

Action - Action is similar to that of epinephrine. It is used for its vasopressor effects, to combat states due to peripheral circulatory collapse. More blood is diverted to the central circulation as a result of its peripheral vasoconstrictive action.

Method - It is injected intravenously.

AMYL NITRITE

Action - It is a yellowish volatile flammable liquid with a peculiarly pungent odour. It is supplied in fragile glass ampules covered in a woven fabric. It is used to rapidly dilate the coronary vessels in angina pectoris, also used in bronchospasm. It is effective within 30 seconds but its duration of action is very short. It relaxes the coronary vessels by direct action. Side effects include marked flushing and throbbing of the head. It should be used with caution in patients with glaucoma or cerebral haemorrhage.

Method - Inhaled while in a sitting position.

AROMATIC AMMONIA

Action - Ammonia is an aromatic hydroalcoholic solution containing approximately 4% ammonium carbonate. It is a reflex respiratory stimulant by virtue of peripheral irritation of the sensory receptors in the nasal membranes, esophageal mucosa and the fundus of the stomach. This indirect action by nerve reflex stimulates the circulation.

Method - Inhaled in the sitting position.

SUMMARY:

A practical approach to the potential dental emergency is suggested. A list of common drugs, their doses, method of administration and pharmacology have been discussed.

The brain tissue can survive 3 to 5 minutes total deprivation of oxygen, therefore when breathing stops or is markedly depressed, assistance must be given by some means of artificial ventilation -- a whiff of air now, may do what Pentacostal gales of oxygen cannot do 30 seconds later to save a failing heart.[3]

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Fig. 1

EMERGENCY PROCEDURES

SYNCOPE	1. Patient into lying position.
	2. Aromatic Spirit of Ammonia.
	3. Get OXYGEN ready.
	4. Get Sphygmomanometer ready.
APNEA	1. Give OXYGEN. (Bag 16-20/min) or
	2. Use Brooke airway, or
	3. Mouth to mouth respiration.
CONVULSIONS	1. 2 cc of 2½% PENTOTHAL stat. I V 30 sec p.r.n.
	2. Set up suction machine, endotracheal tube and vaseline.
VASCULAR COLLAPSE	1. NEO-SYNEPHRINE HCl stat. ½ cc I V 0.2 mg/cc prep. 2-5 min p.r.n.
ALLERGIC EDEMA	1. BENADRYL mgm 3 cc stat I V or
	2. ADRENALIN 1:1000 ½ cc. $\overline{sc}$
BRONCHOSPASM	1. Patient head down and turn to side (Trendelenburg position)
	2. Bag with OXYGEN
	3. ADRENALIN 1:1000 ½ cc $\overline{sc}$ q20 min.
ANGINA PECTORIS	1. AMYL NITRITE or
	2. NITROGLYCERIN tablets. 1:100 gr.

Fig. 2

ROYAL CANADIAN DENTAL CORPS

ASSORTED EMERGENCY CARTRIDGES

Atropine Sulphate

1/150 gr-1 cc.

Action: Vagal blocking agent-overcomes bradycardia.

Use: Circulatory collapse.

Method: Inject iv.

Caffeine Sodium Benzoate

0.45 gms.-1 cc.

Action: Increased blood flow and may give rise in BP and respiratory stimulation.

Use: Collapse.

Method: Inject im.

Phenylephrine Hydrochloride

1:500 - 1 cc.

Action: Vasopressor.

Use: Vascular collapse.

Method: Inject iv, and add atropine sulphate.

* * * * * * * * * * * *

REBASING COMPLETE DENTURES

Lt Col G MacDougall, CD, DDS, BSc

Rebasing is the process of refitting a denture by replacing the denture base material and maintaining or re-establishing the correct occlusal relationship of the teeth.

The tendency to over-simplify an exacting procedure generally accounts for a large percentage of failures. For example, it is common practice on the first appointment to trim the peripheries, muscle-mold with modelling compound, apply a free-flowing impression material over the tissue surfaces of the dentures and then send them to the laboratory for completion.

The aim of this article is to indicate why such procedures often fail and to emphasize the considerations necessary to achieve a greater degree of success. According to Landa[3] "Greater experience and more training are required to accomplish both proper relief of pain from dentures and denture correction than are required for the initial construction". If rebasing procedures are viewed in this light, a greater measure of success will be attained.

Abused Tissue

All abnormalities of the soft tissues beneath dentures should be recognized and treated. They may be caused by systemic disturbances or by mechanical factors associated with ill-fitting dentures. The mechanical factors only will be considered in this article.

The mechanical abuse of soft tissues beneath dentures may be evidenced by slight displacement of tissues in some cases, or trauma, inflammation and gross deformation in others. These conditions are frequently accompanied by loss of retention, lack of stability and changes in the occlusal relationship. When the soft tissues are displaced within normal physiological limits, they tend to return to their rest form, however, if they are subjected to excessive stress, they become deformed, traumatized, less resilient and do not readily return to their normal contour. The mechanical factors which abuse tissue are: incorrect tissue contour or coverage in the denture base, occlusal disharmony, and inadequate free-way space. These factors will be briefly considered in the order given.

The tissue contour of the denture base is probably the most important of these factors. After extractions have been completed, the new bone attempts to build up to the height of the interseptal bone and to the height of contour of the buccal and lingual plates. Therefore, it is important not to have protuberances of base material extending into bony sockets. If they are present on a denture base they should be removed so that the tissue can assume its normal contour.

Over-extension and under-extension of the denture base may cause tissue distortion. Mandibular denture bases should cover the buccal shelf and the retromolar pad. The buccal shelf is one of the most stable bony areas of the mouth and provides an excellent area for stability and support of the lower denture. Maxillary denture bases must cover the tuberosities completely.

Occlusal disharmonies also cause tissue distortion. It has been common practice when new dentures are inserted to dismiss the patient with instructions to return for occlusal corrections after the dentures have "settled in". Gross

occlusal discrepancies in such instances may be concealed because of the ability of tissues to accommodate ill-fitting dentures. Tissue distortion from this cause may be painless and if the tissue is permitted to recover by leaving the dentures out for a period of time, it will become evident that the occlusion is not balanced. It is, therefore, most important to record jaw relations and remount the dentures on the articulator to balance the occlusion before the dentures are inserted.

If the vertical dimension of occlusion is too great, (that is, if the free-way space is inadequate) the patient will eventually gain additional free-way space, but this will be at the expense of the underlying tissue.

Treatment Plan for Abused Tissue

In order to permit tissue recovery, a treatment plan must be instituted which may include any or all of the following steps for eliminating or minimizing the mechanical factors causing abuse:

1. Correct the tissue surface of the denture by locating and relieving areas causing excessive pressure and deformation.

2. Correct gross occlusal discrepancies causing instability and trauma.

3. In extreme cases, use a free-flowing, temporary reline material, such as a zinc oxide impression paste, after the dentures have been left out overnight. This improves their stability. It may be necessary to remove the reline material and repeat the procedure every few days.

4. Minimize stresses with a soft diet and removal of the dentures at night.

5. Instruct the patient to stimulate the soft tissues by massage.

6. Leave the dentures out of the mouth forty-eight to seventy-two hours before impression taking.

Success in obtaining tissue recovery depends upon the patient's co-operation which is influenced by the dentist's convictions as to the importance of the procedure.

Feasibility

Rebasing dentures over deformed and traumatized tissue will merely perpetuate both the condition of the tissue and the factors which caused that condition. Only after tissue recovery has been achieved is it possible to determine the feasibility of rebasing dentures. Unless the following requirements can be met, rebasing is impractical and new dentures are indicated:

1. Normal vertical dimension, a balanced occlusion and acceptable esthetics;

2. Correct position of the occlusal plane and acceptable intercuspation of the teeth;

3. No interference with function and phonetics.

The importance of using an exacting rebase technique cannot be ignored when it is realized that in one operation an impression is taken, peripheral borders are developed and the vertical dimension and the occlusal plane established.

Technique for Rebasing the Maxillary Denture

1. All internal tissue surfaces are relieved and undercuts removed.

2. All peripheral areas are reduced at least two millimeters short of the intended peripheral extensions.

3. Hard bony crest areas of the maxillary ridge are located and four modelling compound stops are placed inside the denture base over these areas. By adjusting the stops, the desired occlusal plane is established.

4. Having established a solid seat for the denture with the stops, peripheral trimming is done with modelling compound (as with an impression tray).

5. Using zinc oxide and eugenol impression paste, the impression is completed.

6. At this time, the upper denture is left in position in the mouth.

Technique for Rebasing the Mandibular Denture

1. Tissue surfaces and peripheral borders are relieved as described for the maxillary denture.

2. Hard bony crest areas of the mandible are located and four compound stops placed in position.

3. Having softened the compound stops, the patient is directed to close gently until the desired vertical dimension of occlusion is obtained.

4. Using zinc oxide and eugenol paste the mandibular impression is completed, but the patient is not permitted to bring the teeth into occlusion. If an attempt is made to obtain a better occlusal relationship at this time, the underlying tissues will be displaced.

Laboratory Procedures

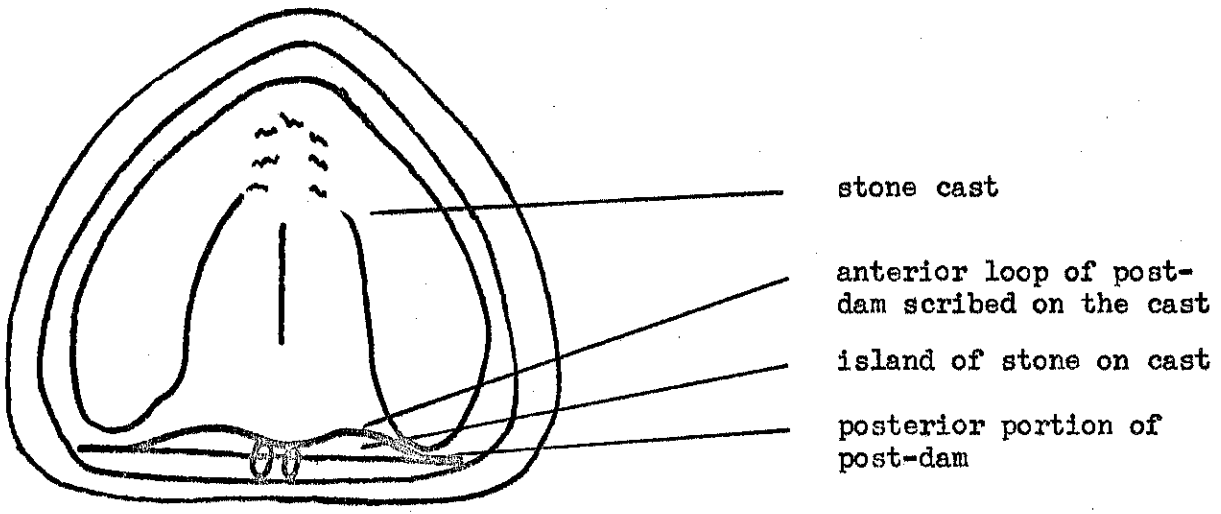
1. The dentures are boxed and stone casts poured.

2. Care must be taken to preserve the impression paste over the crest of the ridges when separating the dentures from the casts.

3. All compound and impression material except that material over the crests of the ridges is cleaned off the dentures.

4. The dentures are reseated on the casts, peripheries waxed up and laboratory procedures continued in the usual manner. When porcelain teeth are involved, easy separation of the old denture base material from the teeth can be achieved by placing the flasks in a burn-out oven at 350° F for eight minutes.

5. The dentist should determine the position of the post-dam and should scribe it on the cast. Its position is normally from hamular notch to hamular notch and through the fovea palatina. A narrow double post-dam (as shown in the illustration) is recommended and it may be scribed on the cast with a number five round bur.



The posterior border of the denture should extend slightly beyond the post-dam.

The purpose of a post-dam is to displace tissue. Displacement with this type is rapid and minimal and is necessary in the technique for "patient remount" to be described.

Patient Remount

The procedures recommended immediately prior to the insertion of new dentures should also be employed with rebased dentures. Occlusal disharmonies quickly cause tissue distortion beneath denture bases and when this occurs the rebasing operation is doomed to failure. If occlusal balance is to be achieved, a "patient remount" is essential.

When the patient returns for his rebased dentures, a face-bow record is taken and the upper denture mounted on an adjustable articulator. Both dentures are placed in the mouth for the first time but the patient is not permitted to close them. A cotton roll is interposed in the first molar area on each side and the patient is instructed to close tightly on the rolls for 5-10 minutes, thus permitting seating in the post-dam area without the influence of unfavourable inclined planes. This procedure is made possible by employing the narrow double post-dam and permits accurate bite registrations for the "patient remount" at this time.

Centric and protrusive registrations are made by interposing quick-setting plaster or modelling compound between the teeth and not permitting closure quite through the material. This operation should be repeated until the registration can be proved. The centric registration is used for mounting the lower denture on the articulator, and the protrusive registration for adjusting the condylar elements. The dentures can now be "ground in" to achieve occlusal equilibration and when this has been accomplished they are ready for delivery to the patient.

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EXTRAORAL RADIOGRAPHY USING A 12" LONG CONE TECHNIQUE

WO 2 John M Sherry

The use of the dental X-ray machine to produce intraoral radiographic surveys has been well standardized with uniformly acceptable results, but few attempt extraoral surveys, due perhaps to the lack of equipment or the difficulty experienced in obtaining consistently good results. Extraoral radiographs are useful in the examination of regions and lesions of the mandible which are of such size or so located that they cannot be taken conveniently or adequately by the intraoral technique. A complete radiographic service warrants wider use of the "long cone" in dental practice.

A technique is described for two basic projections using a long cone to show:

a. The posterior body and ascending ramus of the mandible, and
b. The anterior portion of the body of the mandible.

This technique does not vary greatly from standardized procedures reported in the literature but it has been found that working from a basic position, using the 3" x 12" cone, results are acceptable, uniform and easily obtained.

This procedure in the dental office involves:

1. No additional equipment, special headrests or movement of the patient to another area.

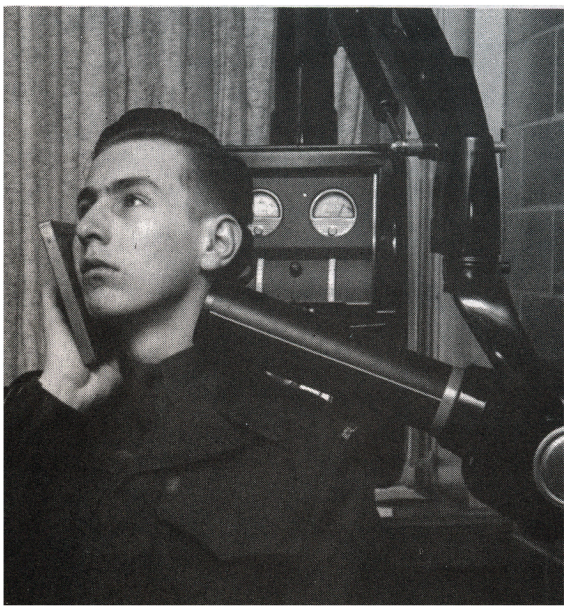
2. A basic alignment of the patient, machine and film from which specific modifications of the patient's head position are made to routinely produce the two required views.

TECHNIQUE

a. Posterior Body and Ascending Ramus of the Mandible

This radiographic view favours, without significant distortion, the third molar area, the inferior and superior borders of the mandible and a portion of the ascending ramus and usually shows the shadow of the mandibular canal.

In the basic position, the subject is seated upright in the dental chair with the sagittal plane of the head vertical and ala/tragus line horizontal (Fig. 1). Final orientation of the patient's head is achieved by movements from this basic position.



(Fig. 1)

(Fig. 2)

The 5" x 7" cassette is positioned against the patient's head and rested on the shoulder with its lower edge supported by the hand, fingers spread on the back of the cassette (Fig. 1). The elbow is kept close to the body to attain stability. With the teeth in occlusion the chin is tilted upwards and forward approximately 1" to 1½". The head is rotated until the ramus to be examined is pressed against the cassette and the nose almost touching (Fig. 2). This is important since it eliminates superimposition of the opposite body of the mandible or the hyoid bone. The vertical centre line of the 5" x 7" cassette is positioned two inches posterior to the outer canthus of the eye.

The average vertico-horizontal angulation is - 17° with the central ray directed ½ inch posterior and inferior to the angle of the mandible on the side not under examination. The usual exposure is 3/8 seconds at 65 KVP and 10 MA for Kodak Blue Brand Medical X-ray film in a cassette with intensifying screen.

Common Errors

1. The cassette is held against the malar bone rather than against the mandible. This changes the vertico-horizontal angle, and produces elongation or foreshortening.

2. The central ray is directed too far anteriorly, resulting in insufficient definition in the desired area. In addition, the shadow of the hyoid bone is cast across the third molar area.

b. Anterior Body of the Mandible

This projection provides a clear view of the anterior portion and the main body of the mandible, commonly described as a lateral jaw examination. The area of the mandible included in this examination extends from the cuspid to the third molar. The maxillary molar region also appears in this view.

The basic position is the same as before and the final orientation is again achieved by deviation from this basic position. The elbow is kept close to the body to attain stability. The head is rotated until the anterior portion

(Fig. 3)

of the body of the mandible to be examined is pressed against the cassette. With the teeth in occlusion, the chin is thrust upwards and foreward approximately 1" - 1½", and the head rotated until the nose is pressed against the cassette (Fig. 3). The average vertico-horizontal angulation is - 10° to - 15°. The central ray is directed anteriorly to pass below the third molar on the side not under examination.

Common Errors

1. The cassette is against the malar bone rather than against the anterior portion of the body of the mandible, resulting in superimposition of the opposite side of the mandible and/or foreshortening.

2. The central ray is directed too far anteriorly resulting in insufficient definition in the area of the second and third molars.

Summary

A technique for the extraoral examination of two portions of the mandible with the use of the 12" long cone has been presented. It provides standardized procedures for radiographing two areas of great importance to the referring dentist, requires a minimum of accessory equipment and no alteration to the dental chair. Working from the basic position, the technique described is easy to master and produces radiographs of good diagnostic value.

★★★★★★★★★★★★

PROMOTIONS

Congratulations to the following Corps personnel and airwomen on their recent promotions:

Sgt	EL	Schell	-	to A/Ssgt) whilst so
Cpl	G	Dancer	-	to A/Sgt) employed
Pte	JARG	Rochon	-	to Cpl
Pte	CStC	Sabine-Paisley	-	to Cpl
Pte	RH	Stenabaugh	-	to Cpl
Pte	WW	Webster	-	to Cpl
Cpl	JA	Brennan	-	to Sgt
LAW	D	Ellis	-	to Cpl
LAW	DAM	Fisher	-	to Cpl
LAW	MLG	Larue	-	to Cpl
LAW	JA	Rathe	-	to Cpl
LAW	GAM	Ridley	-	to Cpl

RELEASES AND RETIREMENTS

Our good wishes are extended to the following RCDC personnel, RCAF airwomen and Part V civilians who have retired or have taken their releases during this Quarterly period:

Capt	EG	Baird	-	Picton
Capt	AP	Menzies	-	RCAF Stn Chatham
Sgt	V	Krymlak	-	DT Lab, RCAF Stn Namao
Cpl	J	Wareing	-	DT Lab, Shearwater
Cpl	MM	Potolicki	-	DA, 35 Fd Dent Unit
AW2	JM	Chekaluk	-	DA, RCAF Stn St Jean
Mrs.	MMB	Van Scherremburg		Pt V DA, Petawawa
Mrs.	SD	Parks	-	Pt V DA, Griesbach

WELCOME

A warm welcome is extended to the following new members of the RCDC and RCAF airwomen:

Pte	JB	Arsenault	-	12 Dent Coy
Pte	RS	Black	-	12 Dent Coy
Pte	HL	Boring	-	11 Dent Coy
Pte	AH	Hannay	-	11 Dent Coy
Pte	DH	Hardy	-	12 Dent Coy
Pte	GED	Hays	-	No 1 Dent Eqpt Dep
Pte	WD	Horne	-	12 Dent Coy
Pte	DF	Ife	-	13 Dent Coy
Pte	LJJ	Nadeau	-	1 Dent Eqpt Dep
Pte	R	Taillon	-	13 Dent Coy
AW2	DJ	Kokoski	-	RCAF Stn Downsview
AW2	JM	Roberts	-	RCAF Stn St Jean

POSTINGS

Capt	DS	Campbell	-	to CFH Halifax from HMCS Cape Scott
Sgt	EV	Tanner	-	to HMC Dockyard Halifax from HMCS Cape Scott
Sgt	MG	Dean	-	to HMCS Naden from HMCS Cape Breton
Sgt	JA	Christiansen	-	to 11 Dent Coy from CBUME
A/Sgt	GD	Dancer	-	to CBUME from 25 COD Longue Pointe
Cpl	CM	Martell	-	to 12 Dent Coy from CBUME
Sgt	VH	Shaw	-	to 8th Cdn Hussars Fort Beausejour from HQ 4 CIBG
Sgt	GH	Storms	-	to CBUME from RCSME Vedder Crossing
Sgt	JR	Yeates	-	to QM Stores Winnipeg from No 1 Dent Eqpt Dep
Sgt	WH	Fougere	-	to HMCS Stadacona from HMCS Cape Scott
Sgt	JAR	Shields	-	to HMCS Cape Breton from HMCS Naden
Cpl	WE	Bussell	-	to Fort Osborne Bks Winnipeg from 7 PD London
Cpl	EJ	Lansey	-	to 3 RCHA Fort Prince of Wales from 8th Cdn Hussars
Cpl	CC	Millard	-	to HQ 4 CIBG from 3 RCHA
Cpl	D	Ellis (RCAF)	-	to RCAF Stn Gimli from 2 (F) Wing
Cpl	KP	Palmer (RCAF)	-	to 35 FDU from RCAF Stn Downsview
LAW	SAM	Biglow (RCAF)	-	to 35 FDU from RCAF Stn Trenton
Miss	ME	Ward	-	to 11 Dent Coy from 1107 Avenue Rd Toronto

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TRAINING

During the period since 31 Jan 62, Corps personnel have attended the following courses:

TRAINING

Doctors' Hospital - Toronto

Maj	WR	Thompson	-	16 Apr - (8 wks)

Ent Air Force Base - Colorado Springs

Maj	JW	Jolly	-	Oral Surgery 5 Feb - 16 Feb

Fort Churchill Arctic Indoctrination Course (Staff)

Capt	HW	Brogan	-	22 Dec 61
Capt	RJ	Paturel	-	26 Jan 62

Office Management - RCASC School - 5 Mar - 30 Mar 62

WO2	ESW	Moore
Sgt	GR	Jennings

F/Sgt Course - RCAF Stn Camp Borden - 12 Feb - 23 Mar

Sgt	CMB	Torrens

TRAINING (cont'd)

RCDC SCHOOL COURSES

Officers' Casualty Care and Officers' Clinical - 5 Mar - 6 Apr

Maj	JA	Lauziere
Maj	HR	Kettyls
Maj	PH	Guevremont
Maj	DJ	Carmichael
Maj	J	McGaughey
LCdr	H	Muller III DC USN
Maj	WR	Baze DC US Army

DT Lab Gp 3 - 5 Feb - 16 Mar 62

Sgt	A	Bramble
Sgt	HW	Roberts
Cpl	EPH	Sprathoff
Cpl	TW	Thrasher
Mr	R	McNabney - DVA Civilian

Dent Asst Gp 1 - 19 Mar - 20 Apr 62

Pte	TJ	Deloughery
Pte	JAY	Ferland
Pte	BA	Green
Pte	RB	Johnson
Pte	DL	Kerr
Pte	JM	MacLean
Pte	JA	Mason
Pte	PA	McCoy
AW1	HL	Brooker
AW2	FW	English
AW2	CM	Fraser
AW2	E	Graham
LAW	PLM	Kennedy
AW1	DJ	Kokoski
AW1	DJ	Lawrence
AW2	SJ	McMillan
AW1	DJM	McNichol
LAW	MBA	Perusse
AW1	GW	Poulson
AW1	A	Skubiak
AW2	MY	Smith
AW1	JM	Stangowitz
LAW	DA	Turner

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Preventive Dentistry

Even prosthodontics which is considered an end of the line treatment has its preventive aspects. In this regard Dr. M.M. DeVan writing in the March, 1952 Journal of Prosthetic states of prosthodontics, "Our objective should be the perpetual preservation of what remains, rather than the meticulous restoration of what is missing."

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

VITAL STATISTICS

DIRECTORATE

Births

Cpl and Mrs ADT Gardner, a daughter Sharon Tracy, born 23 Mar 62 in Ottawa.

RCDC SCHOOL

Hospital

Capt A Van Ryssel was a patient in Camp Borden Station Hospital from 3 - 26 Jan 62.

NO 1 DENT EQPT DEP

Births

A son was born to Sgt and Mrs AJ Tait on 5 Apr 62.

Hospital

Sgt JR Yeates spent from 28 Feb to 13 Mar 62 in NDMC Ottawa.

Mr. R Mills, our towmotor operator, suffered a heart attack 12 Feb 62.

Mr. L Faught, carpenter of this unit underwent major surgery on 19 Mar 62.

11 DENT COY

Marriages

Miss Shirley Fogg (25 Clinic Griesbach Barracks) was married to Mr George Park in Edmonton on March 10th. The happy couple will reside at Kerrobert, Saskatchewan and leave Edmonton with our best wishes.

Hospital

Most members of No 5 Clinic RCAF Station Namao have been periodically hospitalized or sick in quarters since the first of the year following an outbreak of infectious mononucleosis. Sick are Major JCE McDonald, Capt JB Wilcock, Sgt V Krymlak, Sgt GF Keogh and Cpl Y Dundas. The clinic will remain closed until the staff return to duty and meanwhile treatment for the station is being provided by No 25 Clinic Griesbach Barracks. We hope to hear of a complete recovery of all in the very near future - after all fellows, the golf season is fast approaching.

13 DENT COY

Births

Capt and Mrs KSM Mathers, a son, Shawn Eric McLean, on 12 Feb 62
Ssgt and Mrs JA Fraser, a son, Cameron John, on 5 Mar 62
Cpl and Mrs JF Kennedy, a daughter, Patricia Ann, on 30 Mar 62

Hospital

Major AG Andrews - 22-27 Mar
Capt JW Lincoln - 29 Jan - 9 Feb
Cpl JF Kennedy - 15-18 Jan
Cpl JRE Lalonde - 14 Nov 61 -

14 DENT COY

Births

A son, William Retson, was born to Capt and Mrs HW Brogan of Fort Churchill on 4 Nov 61.

On 11 Dec 61 a daughter, Sandra Jeanne, was born to Ssgt and Mrs FR Taylor at Winnipeg.

To Sgt and Mrs DM Hamilton, a son, John Edward, on 28 Feb 62 at Winnipeg.

Hospital

Cpl DL Fenton was in DVA University Hospital, Saskatoon from 22 - 29 Dec 61.

Pte DL Kerr was admitted to Shilo Military Hospital on 6 Mar and discharged the following day.

15 DENT COY

Births

To Sgt and Mrs SE Robertson, a son on 9 Apr 62.

Marriages

AW1 Peck to LAC R Hawryluk at St Jean on 3 Mar 62.

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DIRECTORATE OF DENTAL SERVICES NEWS

Office Location Changed

The oft-rumoured and oft-delayed move of this Directorate to No 8 Temporary Bldg took place on 19 Apr 62. All departments are now operating in the rarefied atmosphere of the fourth floor.

Duty Trips and Visits

Brig Baird flew to the Middle East on 26 Feb 62 to inspect the Dental Detachment at CBUME. Details of this visit will be found in Dent Det CBUME News.

Col Shillington visited The RCDC School 13 Mar 62 to inspect the facilities and staff and to talk with candidates attending the various courses in progress at that time. On his return trip he attended a meeting of the Council on Education of the CDA at Toronto.

Maj Brusso recently completed a coast to coast trip during which he inspected the QM Stores and consulted with the Quartermasters of each unit on matters of mutual interest.

Guest Lecturers

Maj Protheroe presented a series of lectures on Clinic Management to the candidates attending the Officers' Clinical Course at The RCDC School in Jan. Lt Col Hillier conducted a similar programme during the second course in Mar.

Maj Brick DCRA Rep

While on leave, Maj Brick represented the Dominion of Canada Rifle Association at the annual convention of the National Rifle Association held in Washington DC from 31 Mar to 5 Apr 62.

Directorate Team in Interservice Bonspiel

Although they finished off the prize list, this Directorate was ably represented in this important event by the following rink:

Maj Brusso	-	Skip
WO2 Fisk	-	Vice
Brig Baird	-	2nd
Col Millar	-	Lead

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RCDC SCHOOL NEWS

Establishment Increased

No 23 Clinic RCAF Stn Camp Borden is now officially part of the School establishment. The School's gain is 13 Dent Coy's loss.

Curling

Capt Chas Casterton was a member of the Camp Borden championship rink that journeyed to Kingston and walked off with the Central Command trophy.

The Garth C Evans trophy for curling supremacy between Medical and Dental Officers of Camp Borden was successfully defended by two School rinks skipped by our genial CI, Lt Col Geoff Bagnall, and Capt Van Ryssel.

The senior NCOs are still battling their medical confreres for the Viau trophy and have a good chance of finishing on top.

Dick and Jan Troxell, late of the USA, have taken to curling like a duck to water. There'll be an extra carton on that moving van for the return trip "down under" clearly marked "Handle with Care, Curling Trophies".

Skiing

Lt Col George MacDougall was able to enjoy a few weekends of skiing between curling bonspiels and claims the Georgian Bay-Muskoka area is a skier's paradise.

Rod and Gun

Thanks to our rod and gun enthusiasts at the RCAF Station Borden clinic, some of us enjoyed a succulent meal or two of venison this year. Capt Bruce Hudgins and Sgt Don Playford bagged their limit on an "expedition" to Manitoulin Island.

Hockey

WO2 Reece Jackson certainly must welcome the signs of spring. Reece has generously given almost all of his free time this winter sponsoring little league

hockey. A natural athlete, Reece excelled at hockey and softball during his playing days and has done a tremendous job with the Camp Borden children. The RCDC School has donated a Trophy for the Best Goalie of the Bantam Division.

Honours and Awards

The following personnel were awarded 1st Clasp to CD:

Capt CA Casterton	-	5 Nov 61
Capt DG Cartwright	-	19 Nov 61
WO2 RWM Hall	-	27 Nov 61
WO2 Jones JM	-	2 Jan 62

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NO 1 DENT EQPT DEP NEWS

Curling

This unit and No 3 Dental Clinic personnel now feel they have curlers of sufficient calibre to challenge any other dental unit HQ etc, to a curling match, at a place and time agreeable to all concerned.

WO1 Bergland, Sgt Sullivan and their wives won prizes in a mixed open bonspiel held at Camp Petawawa Curling Club.

A curling rink from this unit proceeded to Kingston to participate in the Command Olympic Curling Bonspiel and reached the quarter finals in the "B" event.

Bowling

Major Fletcher took part in the Olympic Bowling playdowns at London Ont 10-12 Apr 62 as a member of the Camp Petawawa bowling team.

Judo

Ssgt Davison competed in a Judo tournament and grading 24 Mar and received his Blue Belt.

Farewell Party

Officers, NCOs and their wives attended farewell parties held in honour of Col and Mrs Cathcart who will be leaving Camp Petawawa on retirement.

Miss Sharon Lee Davison

Our sympathies are extended to Ssgt and Mrs AF Davison on the death of their daughter Sharon Lee on 10 Apr 62.

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11 DENT COY NEWS

Duty Trips and Visits

Colonel BP Kearney visited stations and inspected dental clinics in Vancouver, Chilliwack, Victoria, Comox and Kamloops areas during the period

15 - 24 January. From 1 to 3 February he combined business with pleasure and competed in RCAF Stn Cold Lake's annual "Palmspiel", utilizing the "between games" time to discuss dental problems at that station. Coy QM Stores, 59 Dental Unit (M) and the Currie Barracks clinic were visited 27-28 March.

Capt AG Garden was temporarily employed in 13 Clinic RCAF Stn Cold Lake for a four-week period during Major WH Carter's absence on course.

Captain LK Wansbrough and Sgt JM Moore spent from 3 to 5 April at RCAF Stn Kamloops, ensuring that all is in order for the RCDC to take over the clinic there.

Ssgt MF Conkey has made an installation and maintenance tour of clinics at Chilliwack, Vancouver, Comox and Holberg.

Lt Col OW Crummey, QMS EK Abernethy, Sgt RL Thornton and Cpl J Dion provided treatment for personnel at Camp Wainwright 12-23 March.

Sgt GH Taylor was on TD to 13 Clinic RCAF Stn Cold Lake 7-23 February and again 20 March to 18 April to alleviate the rather acute DA shortage caused by sickness and courses.

Major MP Quinn, Sgt GW Wilkinson and Cpl WG Harmer visited RCN Station Masset from 22 January to 6 February.

Major RJK Pyne and Cpl J Dion were on TD to RCAF Stn Holberg 28 January to 18 February.

Major TD Cobb, Ssgt H Hodkinson and Sgt WJ Arnsby proceeded to Dawson Creek 12 February and on to Fort Nelson 18 February where they were joined by QMS Abernethy. The entire team returned to Edmonton 24 February.

Sgt GF McKay was temporarily employed at RCSME Vedder Crossing from 15 January to 16 February.

Annual Dental Meeting

Colonel BP Kearney and Major TD Cobb attended the first annual meeting of the Alberta Dental Association which was held in Edmonton 29-30 March.

Curling

Colonel BP Kearney served as Chairman of the Western Command Invitational Bonspiel held from 12 to 15 Apr.

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12 DENT COY NEWS

Sports

Capt Hal Bunston led the Shearwater Volleyball team to the Maritime Tri-Service and Maritime open titles. Good luck in the Dominion Finals - Hal.

Capt Jack Quackenbush and his rink won the Stadacona closing Bonspiel and the Second Consolation in the Atlantic Command Bonspiel. He also represented Stadacona in the Provincial Briar playdowns.

Capt Bill Shaw was our able representative at the Eastern Command Basketball championships and the Canadian Army Ski Championships.

WO2 Stan MacLean and Capt Arn Abramson are fast becoming experts in the Judo field. Stan entered the Brown Belt Judo matches at Stadacona recently but "got the chop".

Jack Quackenbush and his rink pulled a rarity on 8 Mar when they built themselves an eight-ender. It was the first perfect-end in local curling circles this season. The curler's dream came on the second end during afternoon play when Quackenbush was tossing them up in RCN Curling Club play. He drew to the house with final rock to give his team the eighth counter. Final tally in the game was 17-7 and the rink accomplished the rarity with only three men.

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13 DENT COY NEWS

Duty Trips and Visits

Capt Hunter visited the newly-acquired clinics at RCAF Stations Moosonee and Ramore from 11-16 Feb and then proceeded on leave to Kingston, Jamaica to thaw out. Later, Ssgt Everett, accompanied by almost a ton of equipment and supplies fitted out the Moosonee clinic in preparation for the arrival of Capt Reynolds and Cpl Sapergia who will be providing dental treatment from 27 Apr to 25 May. Capt Girard and Sgt Holtham returned recently from RCAF Station Ramore where they spent three weeks on temporary duty.

Ssgt Bill Weir Honoured

The Annual Army Mess Dinner at RCAF Station Trenton Sgts' Mess was made the occasion to honour Ssgt Bill Weir on his imminent retirement. A suitably engraved silver tray was presented to him by the PMC. Col Leman, Lt Col RHG Cunningham, Capt Hunter and WO2 John Sherry were among the many guests.

Cpl JA Brennan Wins Prize in Photo Contest

Congratulations to Cpl JA Brennan who was awarded 3rd prize in the recent "Airwomen's Special Twenthieth Anniversary Photographic Contest". She was presented with a cheque by Capt EW Gazo on behalf of the Commanding Officer RCAF Station Trenton.

Dr WO Gardner "Squares-off" in Washington

In early March, Dr and Mrs WO Gardner attended a square dance festival in Washington DC. He reports a wonderful trip and found time between dances to visit Congress and the Smithsonian Institute.

Col Climo Bereaved

Sympathy is extended to Col CBH Climo on the death of his father in late March.

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14 DENT COY NEWS

No 1 Clinic Renovated

Extensive changes recently completed in the clinic at Fort Osborne Barracks provide a new operating bay, waiting room, offices and laboratory space.

Curling

The Annual 14 Dent Coy Bonspiel saw eight teams competing for the fine trophy presented by the Commanding Officer. Members of the winning rink were Ssgt Taylor (Skip), Mrs CA Young, Capt Moore and Sgt Young. A most enjoyable dinner and dance followed. Lt Doyle extended a vote of thanks to Sgt Keith Laurence who arranged for both the ice at RCAF Station Winnipeg and for the wind-up party.

A 14 Dent Coy rink has won the Grand Aggregate Trophy of the Fort Osborne Curling Club for this season. Our congratulations to Ssgt Taylor (Skip), Major Lauziere, Lieut Doyle and Capt Moore.

Bowling

The unit Bowling League ended the season's activities with a most enjoyable banquet at the Viscount Gort Hotel on Sat 28 Apr. Our congratulations to all the trophy and prize winners.

Bereavement

Our sympathies are extended to the family of L/Sgt GA Fogg who died on 6 Apr 62.

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15 DENT COY NEWS

Engagements

AW1 FW English, Dent Asst at RCAF Stn St Jean expects to be married in September to a Pinkerton man (that's his name) from Toronto.

Our "grapevine" tells us that LAW EE Dennis plans to be married in August to an airman from Goose Bay.

Bereavements

Our sympathies are extended to the family of Lt Col PR LaSalle who died suddenly at Montreal on 24 April.

WO2 Moore was recently bereaved when his father died at Springfield, Ont.

Where Are They Now?

AW2 JM Chekaluk recently of RCAF Stn St Jean, gave up service life for the glitter of a cash register in her brother's night club in Edmonton.

Goose Bay

The staff of the clinic are looking after Mrs Robertson and the new baby while "Robby" is at The RCDC School attending the DT Cl Gp 3 course.

Sgt Dorothy Pierce is anticipating her new assignment at RCAF Stn Greenwood with great interest. She has become so acclimatized to the fine winters and beautiful summers of the Labrador area that she expects difficulty in adjusting to the tremendous winter snowfalls and heavy summer rainfalls of lower Nova Scotia.

LAWs Wiens and Dennis have become so fond of serving with the RCDC at Goose Bay that they have both applied for tour extensions.

Sports

Capt "Benny" Parent took a bit of spring leave to try out the golf course. The Russian fallout didn't melt all the snow, however, and he hit more snow banks than sand traps and green combined.

Capt Marcil enjoyed some ice fishing and returned quite red-faced. He called it sunburn (?).

Capt Jack Harrison returned from leave in the Southern States where he and two partners spent a golfing holiday. This included hob-nobbing with the pros at the Azalea Open.

Lt Col JG Butler made the prize lists at the Lakeshore Bonspiel and the Cornwall Men's Bonspiel.

A Pat on the Back to:

WO2 Ed Moore for taking top honours in his class on the recent Office Management course.

Cpl Pete Sprathoff for being tops in his class on the recent Gp 3 DT Lab course.

L/Sgt Erny Jermain for passing a tough Sr NCO Course.

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35 FD DENT UNIT NEWS

Duty Trips and Visits

Brig KM Baird was met at 4 (F) Wing Baden-Soellingen by Lt Col LG Craigie on 1 Mar 62, enroute to CBUME.

Lt Col LG Craigie and Capt DH Evans visited all Wings during the preceding quarter.

Maj CJ Sivell, WO2 AG Cross and Sgt JF Marchand proceeded to England 5 Jan to 9 Feb to provide dental services at 30 AMB Langar and CJS London. On 27 Mar Maj FD Charman, Sgt KS Rothwell and LAW JA Bowes made the tour. The newly acquired facilities at the London clinic are pictured on the following page. No wonder this TD to the London clinic is considered the "plum" of the Air Division duty trips!

Maj WH Harrington and WO2 AG Cross went on TD to Decimomannu, Sardinia from 21 Feb to 7 Mar 62. Cheer up men, at least the leather goods are cheap in Cagliari.

CJS Clinic, London, England

L/Sgt SD Posyluzny, DER 4 Fd Dent Coy, visited all Wing Clinics and HQ from 6 Feb to 1 Mar 62.

Lt Col LG Craigie went to Decimomannu 23 Jan to 30 Jan 62 and to 4 Fd Dent Coy and 4 CIBG on 15-20 Feb 62.

CGS Makes Presentation

Lt-Gen G Walsh, CBE, DSO, CD, Chief of the General Staff visited HQ 1 Air Div on 11-12 Feb 62. Following his inspection of the Guard of Honour on 12 Feb 62, Lt-Gen Walsh presented the first clasp to the Canadian Forces Decoration to WO2 AG Cross.

Curling

Maj Hinch, WO1 Loken and Sgt Roberts formed 3/4 of the winning rink in the HQ 1 Air Div Annual Bonspiel held at 3 (F) Wing Zweibrucken on 21-22 Jan 62. The rink won five games and lost none. Shown here is Skip, Sgt Roberts receiving the 1 Air Div Curling Trophy from W/C CS Yarnell, CO Support Unit at Metz.

On 10-11 Feb the same rink placed second in the 1 Air Div Bonspiel at 3 (F) Wing.

Hockey

Cpl WJ Parker was named to the HQ 1 Air Division All-Star Hockey Team on 30 Jan 62. His team subsequently won the 1 Air Division Hockey Championship, defeating 3 (F) Wing 2 out of 3.

Visit to Orphanage

Over the last Christmas period, WO1 CH Loken, visited the Sisters of Sacre" Coeur Orphanage, in his capacity as PMC Sgts' Mess, bringing a little cheer to the Sisters and their charges.

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4 FD DENT COY NEWS

Duty Trips and Visits

A mobile dental sub-section, composed of Maj DH Skinner, WO2 PL Gourlay and L/Cpl W Fiddler Dvr, travelled to Antwerp 4-18 Feb to render comprehensive treatment to the personnel of 1 CBOU and to examine the children of the DND School.

L/Sgt Posyluzny SD visited 35 Fd Dent Unit from 6 Feb to 2 Mar 62 repairing and rehabilitating unserviceable dental equipment.

Curling

A rink composed of Lt Col Evans, Capt Kelly, Sgts Cahill and Hill took part in a curling bonspiel 4-6 Jan 62 sponsored by 1 CDN Gds at Fort York. The RCDC rink finished as runner-up in the main event.

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CBUME NEWS

Leave

Since the last issue of the Quarterly, the following personnel have been to the UNEF Leave Centre, Cairo: Major Small, Capt Arpin, Ssgt Schell; in addition, Major Small and Capt Arpin went on weekend leaves to Beirut.

Sgt Drawe had a three-week tour of Europe visiting relatives in Germany.

Crown and Bridge Clinic

On 24 January, personnel of the Cdn Dent Det held a Crown and Bridge Clinic for all contingent UNEF dental officers. Present at the meeting were Capt 1st Class V Stankovitch and Lieut G Djeordive (Yugoslavia), Lieut R de Deus, (Brazil), Capt O Gronquist (Sweden), and Lieut R Schmidt-Hansen (Denmark), as well as the Brazilian and Yugoslav interpreters. Major Small welcomed the officers and introduced the programme which consisted of two films from Canada on the construction and insertion of immediate temporary bridges. A table clinic was presented by Capt Bunt on the preparation and insertion of a typical immediate bridge and Capt Arpin and Sgt Martell showed a direct impression and casting technique for a permanent bridge to replace the temporary bridge demonstrated by Capt Bunt.

After the table clinics there was a discussion period on the material presented.

The whole clinic, including the laboratory section, was "open house" to the visitors, and all members of the Detachment took part in preparing for the event and answering questions.

As spokesman for the contingent dental officers, Lieut Schmidt-Hansen thanked the personnel of the Detachment for their hospitality and expressed the hope that such clinics could become a regular feature, enabling dentists from various countries to pool their knowledge and experience.

After the meeting the visitors were guests of the Canadian Dental Office for dinner at the Officers' Mess, Camp Rafah.

Visit of Brigadier Baird

On the last day of February, Brig KM Baird landed at El Arish airfield and was met by Col GF Stevenson, Chief of Staff, and Major Small. Brig Baird's main purpose in coming to the Middle East was to interview personnel of the Canadian Dental Detachment and to inspect dental facilities for Canadian and other United Nations Forces in the Gaza Strip. Due to unavoidable circumstances a re-arrangement of flight plans by the RCAF had to be made and his tour, originally scheduled for one week, was extended to two. This change of plans gave Brig Baird a chance to visit Cairo and Beirut with Major Small.

Front Row - L to R: A/Sgt Strub, A/Sgt Martell

Second Row - A/Sgt Belanger, Capt Arpin, Brig Baird, Major Small, Capt Bunt, A/Ssgt Schell

Back Row - Cpl Giles, Sgt Storms, A/Sgt Drawe

Rotation Parties

Since the last issue of the Quarterly, rotation parties were held for Capt Bunt, Sgts Christiansen and Martell, and Cpl Giles, who left for various clinics in Canada on the completion of their tour with CBUME.

New Arrivals

We extend a warm welcome to Sgts Glen Storms, Geoff Dancer, and Tony Strub who have recently arrived from Canada. Our wish is that their tour with CBUME will be a happy one, and that they will avail themselves of the many opportunities to travel throughout the Middle East.

Duty Trips

Capt Arpin and Sgt Boulanger paid a visit to the Recce outposts to see for themselves what life was like in the Squadron. Not to be outdone, Staff Schell went on a tour of the ADL. All three reported that the trips were well worthwhile.

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MILITIA IN THE NEWS

Col.JP Whyte Inspects Special Militia

Col JP Whyte, former ADDS Prairie Command and currently Honorary Colonel of the 14th Canadian Hussars, recently held a passing out ceremony in the Swift Current Armoury for the second special militia class. After the march past, inspection and demonstration on national survival techniques, Col Whyte addressed the "ambassadors of survival" with an inspiring speech on the Militia's role in national survival operations.

Pictured below is Col Whyte (left) receiving the rescue helmet and gold efficiency cord from Major IG Clifton, the second in command of the Hussars. At this time the Colonel was made honorary captain of the rescue squad.

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