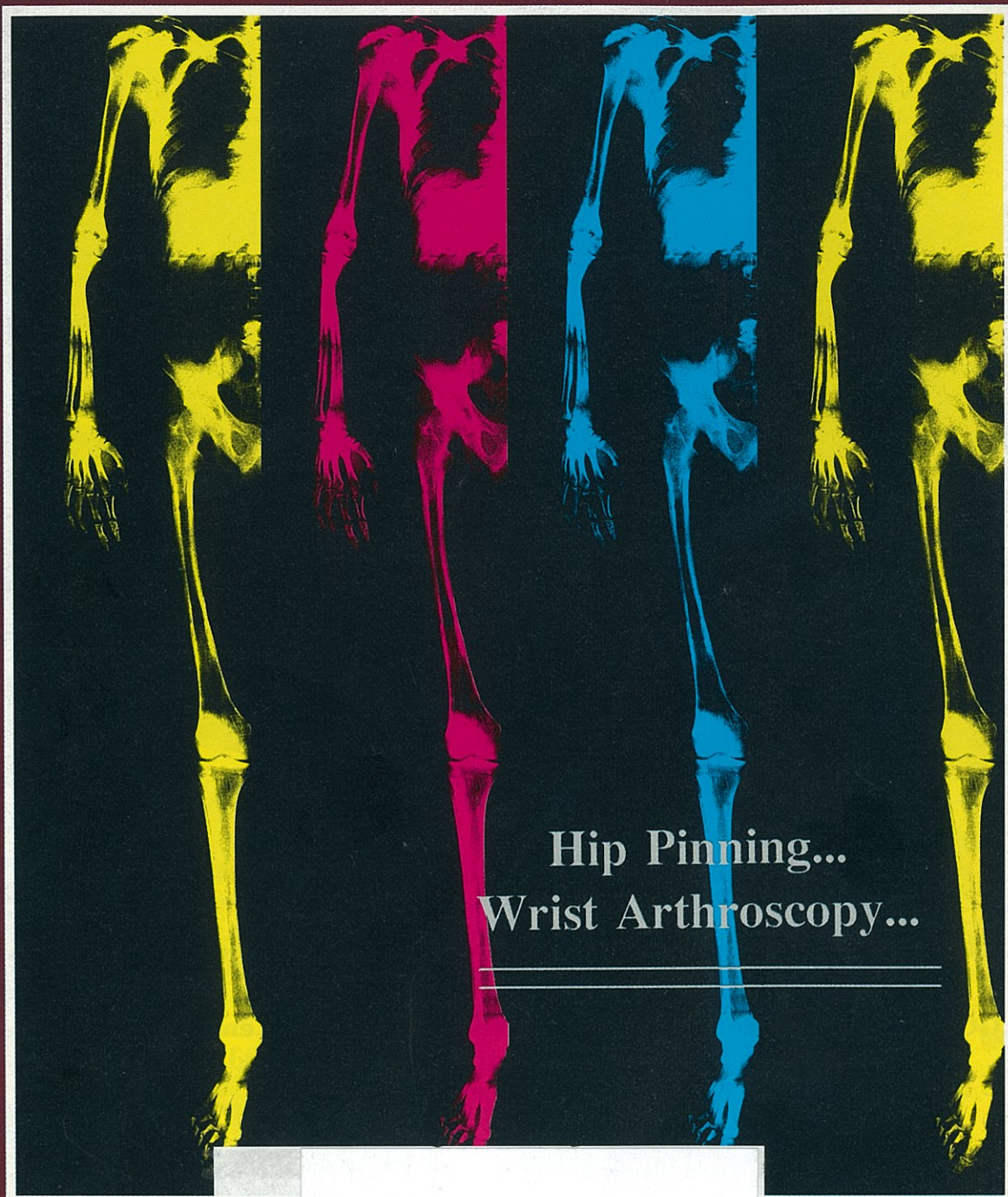


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Volume 7, Number 6, December, 1989



Hip Pinning...
Wrist Arthroscopy...

CANADIAN Operating Room Nursing Journal

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Canadian Operating Room Nursing Journal

Feature Articles

04 Arthroscopic Surgery of the Wrist

Since the 1970's, arthroscopy has revolutionized many orthopaedic procedures, particularly knee surgery. Recent improvements in the technology have permitted surgeons to perform arthroscopy on smaller joints, including the ankle and shoulder. In this paper, a technique of wrist arthroscopy is described along with an outline of the instrumentation used.

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10 Hip pinning - an Historical Perspective

The development of hip-pinning has depended upon the need for improved methods of treating hip fractures, as well as technological innovations. These improved methods and new innovations are discussed from the standpoint of the various treatments and technical innovations that have occurred over the past 150 years.

By Kim Cable, R.N.

16 Preventing UTI Following Hip Surgery

Indwelling catheters, especially in such lengthy post-op recovery procedures as hip surgery, increase the risk of the patient contracting a UTI. In this submission, a discussion of the need for the establishment of policies for the management of UTIs following catheterization is presented.

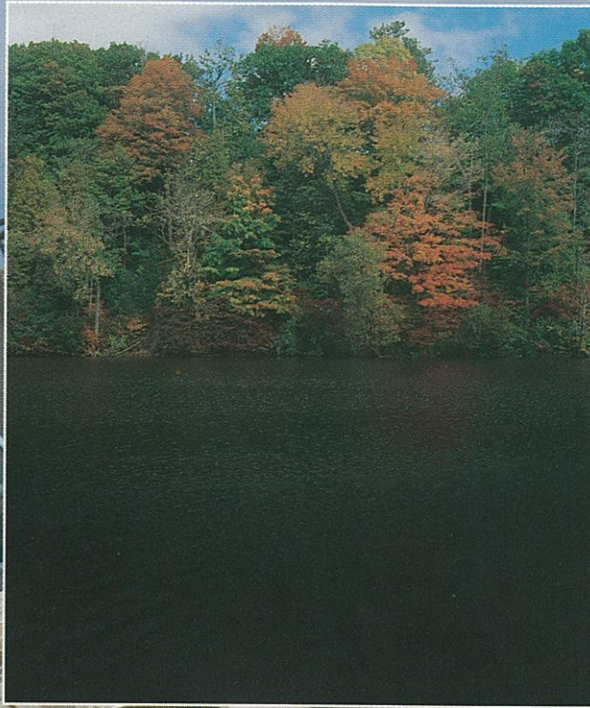
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Arthroscopic surgery of the wrist

By Deanne Fitzpatrick, R.N.

Wrist arthroscopy is a recent development in the field of orthopaedics. Clinical use of the arthroscope in North America began in the 1970's and revolutionized the management of knee problems. Patients undergoing arthroscopic knee surgery tend to rehabilitate more quickly and experience less pain post-operatively than patients undergoing invasive surgery. Infections following arthroscopy are rare, and in most cases, arthroscopic procedures are performed on an outpatient basis.¹

Smaller joints

Following the success that knee surgeons have had with the arthroscope, orthopaedists have become proficient at performing arthroscopy on smaller joints, including the shoulder and ankle.

At Victoria Hospital in London, Ontario, Dr. James H. Roth, for the past seven years, has been developing a technique of wrist arthroscopy in hopes of improving the diagnosis and treatment of internal

derangement of the wrist.² (Figure 2, next page). The purpose of this paper is to describe a technique of wrist arthroscopy and to outline the instrumentation we are presently using.

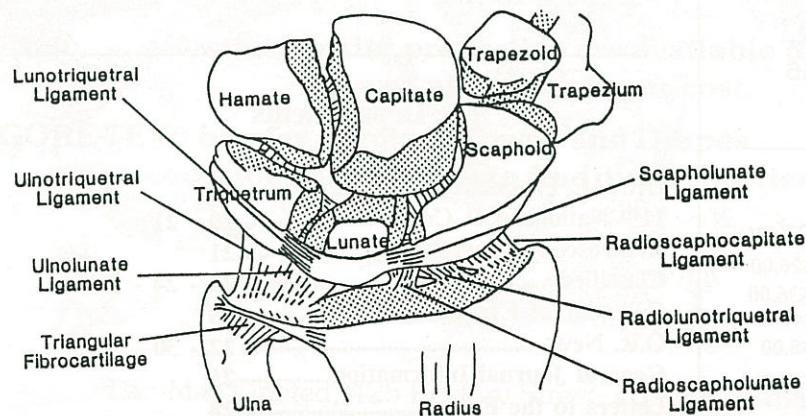
Anatomy

The bones of the wrist are called carpals and are situated in two rows of four each. In the proximal row from medial to lateral are the pisiform (not seen on the dorsal view), triquetrum, lunate and scaphoid. In the distal row from medial to lateral are the hamate, capitate, trapezoid and trapezium which articulate with the five metacarpal bones of the palm of the hand. The styloid process of the radius is larger than the styloid process of the ulna and articulates with the carpal bones of the wrist. (Figure 1, below)

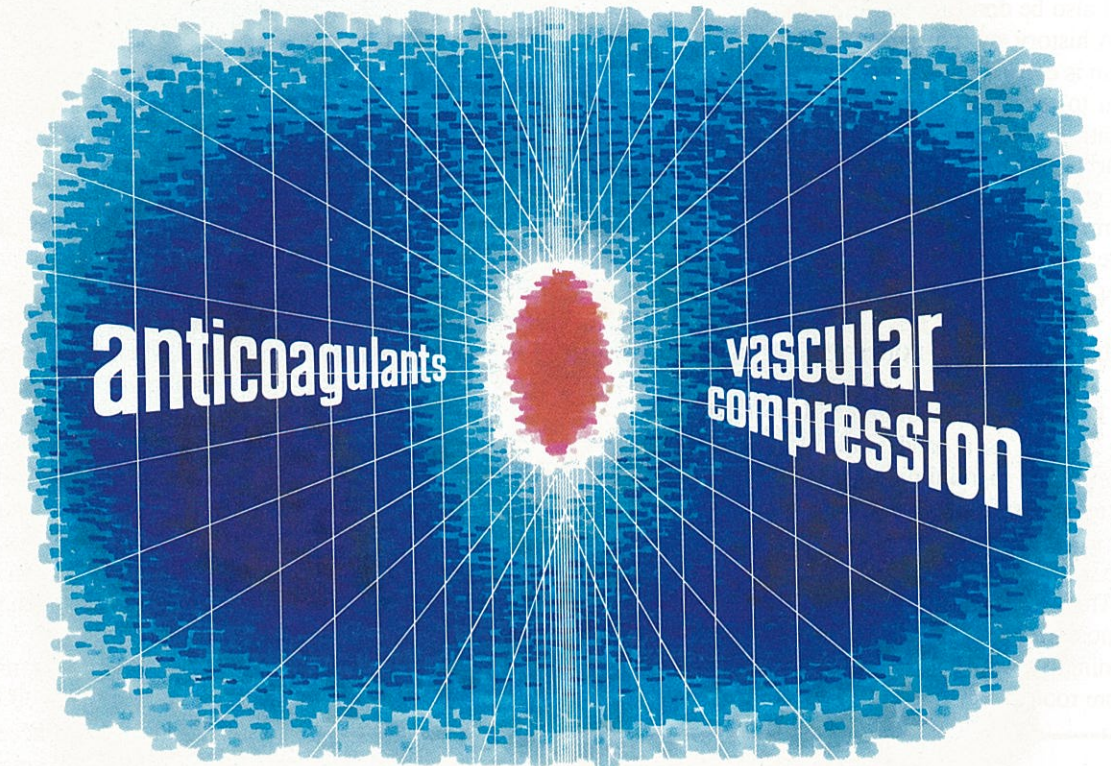
The wrist joint is a complex synovial joint composed of fifteen bones and twenty-seven articular surfaces. This anatomic complexity provides numerous opportunities for the development of joint symptoms.³ Included are synovitis, degenerative arthritis, loose bodies, carpal instabilities, intra-articular fractures, non-union of fractures, distal radioulnar joint disruptions, and triangular fibrocartilage tears.

Pre-op routine

Wrist arthroscopy is performed in the operating room with the patient under general anaesthesia, axillary or intravenous regional block. Most



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procedures are performed on an outpatient basis.

The patient arrives in the admitting department two hours prior to surgery. If x-rays are necessary, the patient will go directly to that department and then proceed to the Day Surgery unit. On arrival the patient will change into a hospital gown before filling out the necessary consent forms and questionnaires. Routine lab tests will also be done at this time.

A history and physical examination is carried out prior to admission to the O.R. theatre. The circulating nurse will review the chart and verify with the patient the correct limb. This must be accomplished before entering the O.R. in order to ensure that all equipment is located on the appropriate side. (Figure 3)

Intra-operative routine

The use of the Arthrobot™ Upper Limb Positioning System as a hand holder for wrist arthroscopy has helped to minimize the amount of time spent securing a safe position for the patient's arm and also allows the surgeon to reposition the limb as necessary and still maintain a sterile field.

The Arthrobot is attached to the O.R. bed on the opposite side to the surgical site. This aids positioning of the sterile set-up and permits the surgeon more room on the operative side.

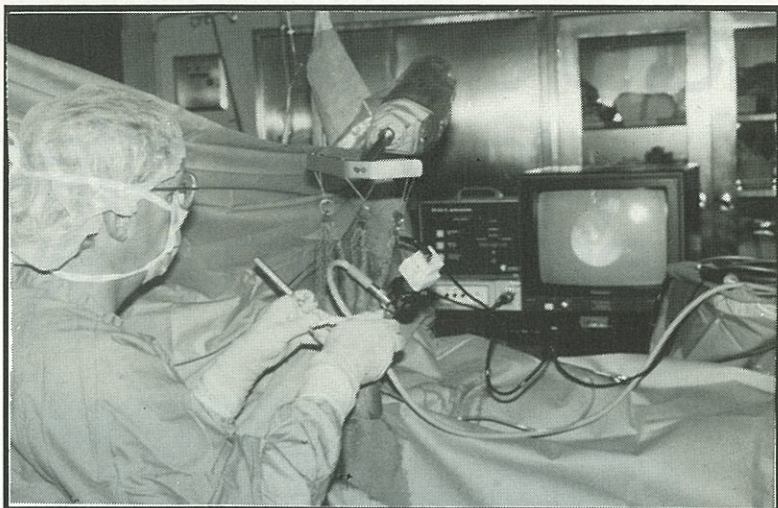


Figure 2 - Wrist arthroscopy being performed

The patient is supine with his torso close to the operative side to allow for shoulder abduction and for the arm to hang free from the table. The Arthrobot slides onto the side rail of the O.R. bed.

We also have a similar piece of side rail and metal straps attached to a wall in the corner where the Arthrobot stands elevated from the floor when not in use. For ease of handling we suggest hooking it up to a nitrogen line set at 90 lbs. PSI and to the electrical plug while it is still on the wall. The nitrogen causes the system to become rigid while the electrical connection enables the articulation and movement of the Arthrobot arm by pressure pads being touched. (Figure 5, page 9)

While the patient is awake the Arthrobot arm is left in the straight-up position, attached to the O.R.

bed. The finger trap accessory with assorted small, medium and large finger grips has been flash autoclaved and once cooled will be placed in an arthroscopy camera drape. The patient's non-operative arm will rest on an arm-board just below the Arthrobot where the anaesthetist will start an intravenous of 5% Dextrose and 0.2% NaCl. Vital signs

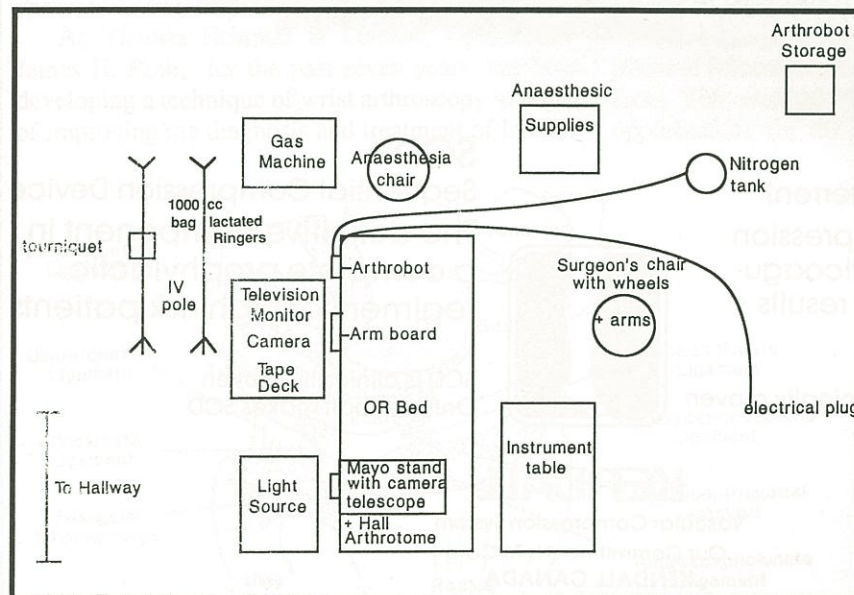


Figure 3
Operating Room
Set-up for
Left Wrist Arthroscopy



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and EKG will be monitored for the duration of the surgery. The anaesthetic drugs will be administered, and once the patient is asleep the circulating nurse will bring the Arthrobot across the patient and hold the quick couple adaptor open for the surgeon or scrub nurse to attach the finger traps. The circulating nurse then pulls the outside edge of the arthroscopy drape and covers the Arthrobot to ensure sterility when the device is activated by the surgeon. A tourniquet has been applied to the patient's upper arm and a canvas sling placed over the top. The hand and arm are prepped with a tincture of Iodine solution. It is important to use non soap-based solutions so the fingers will not slip from the traps.

Two or three fingers are placed in the traps, either radial or ulnar, depending on the pre-operative diagnosis. While still holding the hand with a sterile towel for extra support, the surgeon positions the Arthrobot with fingers attached in a comfortable working position exposing the dorsum of the hand.

Draping

The patient is then covered with an adherent split sheet. The surgeon will sit on a special replant chair with adjustable arm rests and wheels. Mayo covers are draped over the arms with a sheet over the back and seat. Seven pounds of weight are attached to the ring at the lower end of the canvas sling by the circulator to provide extension of the wrist joint.

The scrub nurse will hand off the ends of the fiberoptic light cord, arthrotome cord, suction tubing and sterile I.V. tubing, which will be attached to a 1000cc bag of lactated ringers.

Technique and instrumentation

All the video equipment, including the T.V. monitor, camera, light source, tape deck and the power source for the arthrotome shaver, is positioned on the opposite side of the O.R. bed for ease of visualization by the surgeon and to maintain a sterile field on the operative side.



Figure 4. Instruments for arthroscopic wrist surgery

- | | | | | |
|---|---|--|-----------------------------|--|
| Suction tubing
towels, Mayo covers
X 2, Sheets X 2
Adherent split sheet
sterile I.V. tubing | Prep dish
scissors
local syringe | Lactated Ringers
20cc syringe
#18 hypodermic | Kelly's
T clips | Finger trap
in arthroscopy
drape |
| | 5mm telescope
with sheath
and obturator | 2mm telescope
with sheath
and obturator | | |
| | | Straight
and angled
currettes | Obturator &
3mm sheath | |
| Punches: right angles,
left angled and straight | Pituitary
rongeur | Wrist hook
& crochet hook | #15 blade &
knife handle | |

Techniques and instrumentation of wrist arthroscopy have been modified from those used in knee arthroscopy. Instruments continue to evolve as new procedures are conceived. (Figure 4)

To obtain a view of the wrist we use a combination of distension and distraction with an angled arthroscope. The arthroscope gives a magnified view. An angled probe is used to determine the size of the pathology seen and to aid orientation of what is seen on the monitor.

Two portal sites are chosen, one for visualization and one for operating. An 18 gauge needle attached to a 20cc syringe is inserted into the radiocarpal joint which is distended with lactated ringers. The needle is removed and a longitudinal stab incision is made with a No. 15 blade through the skin and dorsal capsule. The blunt-tipped trochar and arthroscope sheath are introduced through the portal. The trochar is removed and the 3mm diameter, 30° angle arthroscope with chip camera attached is inserted. The I.V.

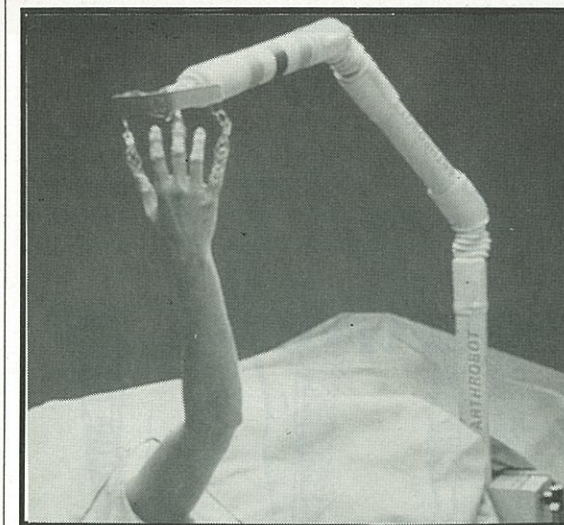


Figure 5. The arthrobot with the Roth finger trap accessory showing finger grips

tubing is connected to the telescope to provide continuous distension of the joint.

After probing to assess the arthroscopic findings, it may be necessary to do a synovial biopsy with pituitary rongeurs, or a piece meal excision of a triangular fibrocartilage tear with the small but sturdy graspers and punches. The high speed arthrotome with hand control is attached to suction and can be used for debridement and irrigation of the joint space. It is also possible to reduce intra-articular fractures using a hook similar to a crochet hook and to remove any fragments. These could be reduced or immobilized by percutaneously inserting a small pin. It will be checked under direct visualization and also occasionally with the aid of fluoroscopy and intra-operative x-rays.

At the end of the procedure the joint is injected with 10cc of 0.5% bupivacaine hydrochloride to diminish post-operative discomfort. A bulky hand dressing incorporating volar and dorsal plaster splints is applied and the tourniquet released.

Summary/conclusion

The patient will be transferred to the recovery room for approximately forty-five minutes where vital signs and fingers are checked. The arm will be kept elevated with the patient being instructed to do the same on return to Day Surgery as well as when at home.

If there is a change or loss of sensation, swelling, coldness or blueness, it is imperative that the physician be notified. The patient will also be instructed to return to the clinic to have the dressing removed. The findings at surgery will be reviewed with the patient at that time and any necessary follow-up treatment discussed.

In summary, a technique of wrist arthroscopy has been described, with the instrumentation that we are presently using also being described. ■

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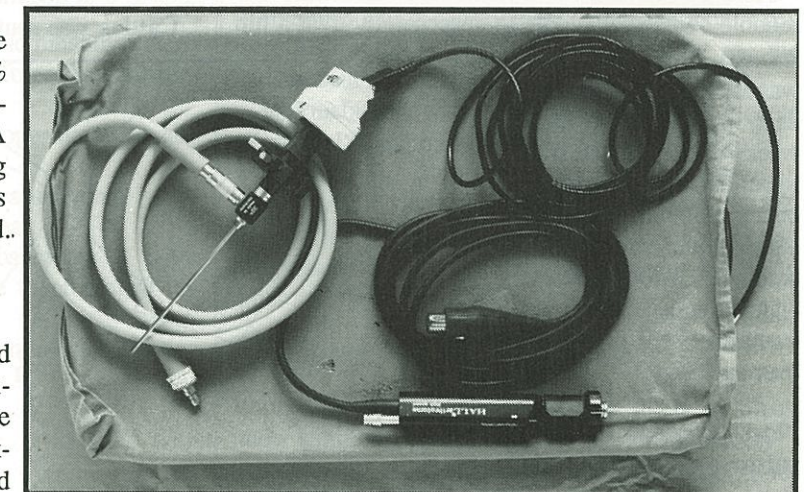


Figure 6, Mayo tray with a 3mm telescope, a chip camera and the Hall arthrotome

Hip pinning...

An historical perspective

By Kim Cable, R.N.

"We come into the world under the brim of the pelvis and go out through the neck of the femur".¹ This quotation conveys the pessimism regarding treatment of hip fractures. There have been a number of important milestones in hip-pinning as a method of dealing with hip fractures. This submission will take a look at these milestones, as well as examine the various catalysts which initiated the procedure and subsequent improvements.

Hip fractures

- There are two main types of hip fracture (Fig. 1):
- Neck (intracapsular) fracture.
 - Trochanteric (extracapsular) fracture.

Conservative treatment

Prior to the advent of hip-pinning, there were few reliable choices available to successfully treat a hip fracture. Immobilization was often fatal because elderly people died within weeks of the fracture due to cardiac, renal or pulmonary problems exacerbated by the enforced inactivity.² Unfortunately, eighty percent of these fractures occur in people over age sixty.³

Non-surgical intervention

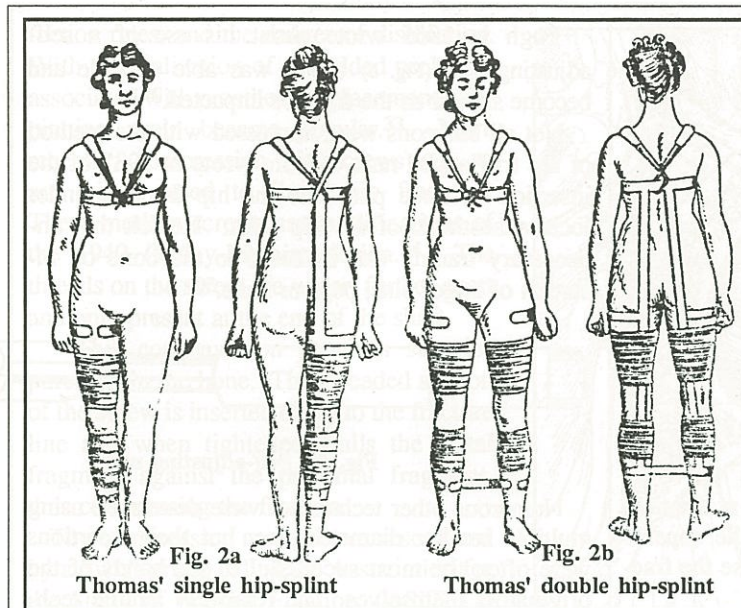
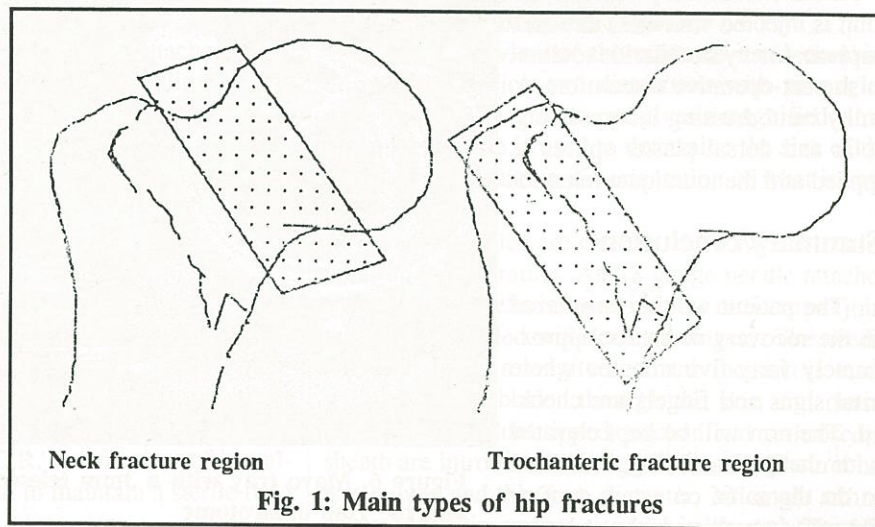
Non-surgical intervention took three basic forms:

1. Prior to the turn of the century, simple traction was the common method of treatment. An orthopaedic textbook printed in 1901 recommended placing the patient on a "comfortable, firm, hair mattress" in conjunction with traction. This method however, did not efficiently immobilize unstable bone fragments.⁴

2. The Thomas hip-splint (Fig. 2a and 2b) was used with traction to afford greater immobilization.

3. The third method was made popular in the early 1900's by Whitman. The fracture was reduced under X-ray observation, and a hip-spica cast was then applied from the lower chest to the toes. This cast remained for six months.⁶ "Cotton advocated artificial impaction of these fractures by a blow of a heavy mallet against the padded trochanter as an adjunct to cast treatment."⁷

Casting was routine procedure at that time. It was



thought that about thirty percent of those who survived had successful union of the fracture.⁸ Casting was better than traction or splinting, but there was a substantial failure rate, which wasn't evident until after the plaster had been endured.⁹

There is little wonder that with the limited choice of treatment and disappointing results, surgeons were attempting to develop alternate means of treating hip fractures. At the turn of the century, one author grimly wrote: "Slight shortening with a little deformity, some limitation in the movements of the hips, a limp, but a fairly useful limb are to be hoped for."¹⁰

Disadvantages

- High mortality rate of the predominantly elderly patients who were treated with forced recumbency and immobility.
- Permanent disability after improper union in cast, splint or traction.
- Potential for development of pressure sores.
- Discomfort of long term cast wear.
- Atrophy of soft tissue and absorption of bone, including at neck of femur due to prolonged immobilization.
- Delayed weight bearing for six months or more.
- Expensive, lengthy hospital stay.¹¹

Operative treatment

The existence of hip fractures was first documented by Ambroise Pare about four hundred years ago.¹² "Internal fixation of this fracture by nails,

screws and (bone and ivory) pegs is by no means a new procedure."¹³

The first reported pinning of this fracture was in 1850 by Langenbeck.¹⁴ Silver or platinum devices were used in the late 1800's because it was "thought that silver was antiseptic or self-sterilizing when implanted".¹⁵ In 1883, Senn achieved a higher success rate in uniting femoral neck fractures in dogs by use of internal fixation.¹⁶ Nicolaysen in 1897 developed a nailing technique, and like his predecessors, without the advantage of X-ray.¹⁷

Until the late 1920's, other methods were used, including long carpenter screws which proved inadequate because of poor purchase in cancellous or spongy bone. Bone pegs cut

from the patient's tibia were also used. These were thought to have better hold and the ability to be incorporated in the healing process.¹⁸ In 1922, steel woodscrews were used with very few reports of satisfactory results. They fell out of favour due to numerous failures.¹⁹

It was not until 1931 when Smith-Peterson published the results of his work with the tri-flanged nail (Fig. 3) that hip-pinning regained popularity.²⁰

Smith-Peterson was not the first to develop a flanged nail. Hey-Groves had devised an earlier quadri-flanged nail, but the metals available at that time proved unsatisfactory to make the device a success.²¹ Indeed, the first nail Smith-Peterson developed was quadri-flanged, but three flanges were soon found to be adequate. The earliest tri-flanged nail was made from alloys which caused much tissue reaction. They were also made from two different metals, i.e., the flanges made of steel and ends made of brass.²²

Unsatisfactory metals had plagued the developers of internal fixation devices and doomed them to failure until 1931. Smith-Peterson was fortunate with respect to the timing of the introduction of the tri-flanged nail because the physics of metallurgy had progressed to the discovery of stainless steel and other satisfactory metals.²³

Advantages of tri-flanged nail:

- made of stainless steel and less likely to break under strain and caused virtually no tissue reaction
- the design of the tri-flanged shape helped it remain solid due to superior purchase in the bone.²⁴

The main disadvantage of the early Smith-Peterson nail was the method employed to insert it: "At first

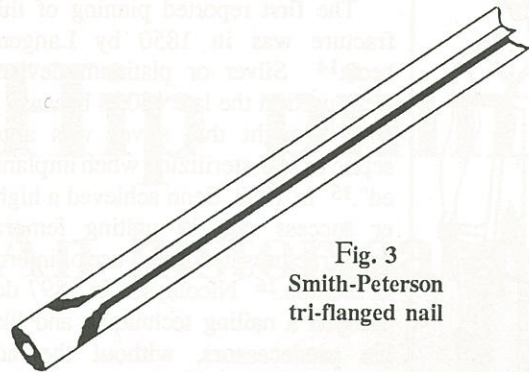


Fig. 3
Smith-Peterson
tri-flanged nail

these three-flanged nails were introduced at the time of an operation on the fracture itself, the capsule being divided and reflected so as to expose the fractured surfaces..."²⁵

An important improvement was made in the Smith-Peterson nail in 1932 to remedy the problem of having to open the hip joint in order to nail the fracture.²⁶ Closed reduction of the fracture and nailing using X-ray control to improve accuracy was suggested by Wescott/Johansson cannulated the nail so that a guide pin could be passed up its centre. This proved important because it allowed the nail to be inserted through an incision over the trochanter at the lateral thigh, and dispensed with the need to open the hip joint itself.²⁷

In 1937, Thornton developed a plate which attached to the tri-flanged nail and was fixed to the lateral femur to increase stability. Further development by Jewett in 1941 involved welding the plate to the tri-flanged nail (Fig. 4) to provide greater strength.²⁸

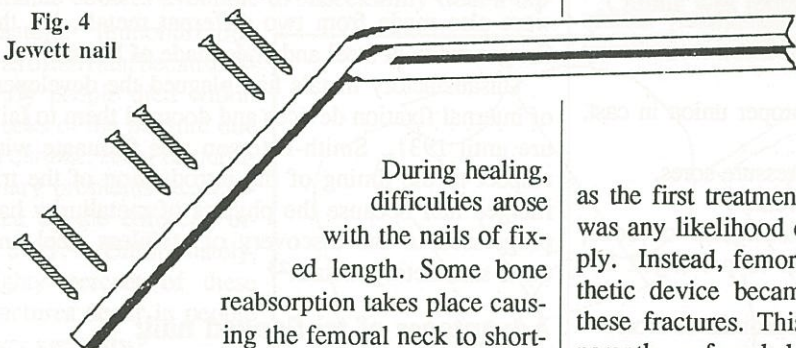


Fig. 4
Jewett nail

During healing, difficulties arose with the nails of fixed length. Some bone reabsorption takes place causing the femoral neck to shorten slightly. However, the nail length remains constant, without the ability to back out laterally due to the femoral plate or one piece Jewett construction. Therefore, the nail would sometimes penetrate the femoral head into the acetabulum.

Pugh in 1955 wrote about his use of a self-adjusting nail (Fig. 5) which was able to slide and become shorter as the fracture impacted.²⁹

Not all surgeons were impressed with the method of the tri-flanged nail. Moore wrote in 1937 of the insertion of three pins into the hip fracture under local anaesthetic of the hip joint. He felt that unnecessary trauma was inflicted to the bone on insertion of larger pins, pegs or nails.³⁰

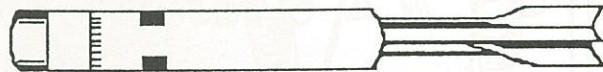


Fig. 5 - Self-adjusting nail

Numerous other techniques were developed using multiple smaller diameter pins, but their insertions were often the most successful in the hands of the originators themselves. The relatively simple technique of inserting a single nail has proven itself more effective in general use.³¹

Regardless of the impressive number of devices available for hip-pinning, there was still a distressing complication that occurred after internal fixation of some hip fractures. Femoral neck fractures and trochanteric fractures differ in their healing capacity. Trochanteric fractures unite more easily due to the wider area of bone involved, the cancellous nature of the bone, and the superior blood supply of both fragments. In neck fractures, however, the narrow area of bone involvement and lower percentage of cancellous bone, along with a compromised blood supply especially in the distal fragment, may lead to avascular necrosis. Avascular necrosis is the death of the head of the femur, in this case, due to restricted blood supply.³²

In the 1970's, the prospect of the femoral head developing avascular necrosis, even after accurate and successful hip-pinning, caused many surgeons to abandon hip-pinning as the first treatment for neck fractures where there was any likelihood of an impediment of blood supply. Instead, femoral head replacement by a prosthetic device became popular in the treatment of these fractures. This response, however, was apparently unfounded as shown by a study of 500 patients. Sixty percent of the patients had successful union of their fractures, and of those who did develop avascular changes, not all needed further surgical intervention. Prosthetic replacement also has serious complications associated with it when compared to hip-pinning. These include higher mortality and in-

fection rates, and the danger of dislocation. With the realization of the added problems associated with prosthetic replacement, hip-pinning again became popular.³³ More recently, compression hip screws (Fig. 6) are widely used to fixate hip fractures. These modern screws are modifications of the 1940 Godoy-Moreira design.³⁴ The threads on the screw are wider, further apart and only present at the end of the shaft.

This configuration provides superior purchase in the bone. The threaded section of the screw is inserted distal to the fracture line and when tightened, pulls the distal fragment against the proximal fragment, thus compressing the fracture.

The compression method was researched by a Swiss group called the Association for the Study of Internal Fixation. (ASITF) It was founded in 1958.³⁵

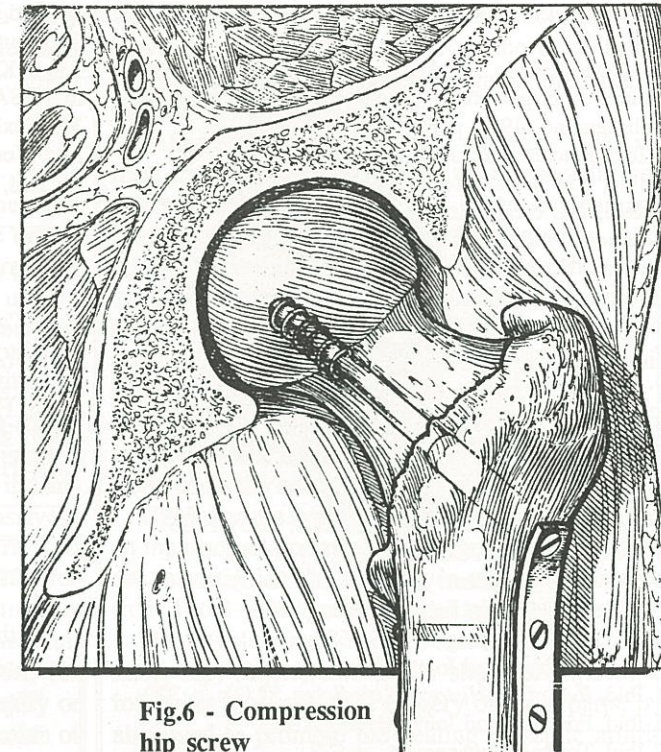


Fig.6 - Compression
hip screw

Interfragmental compression

They stressed that stability is of paramount importance to the successful outcome of internal fixation. This stability is achieved through interfragmental compression.³⁶

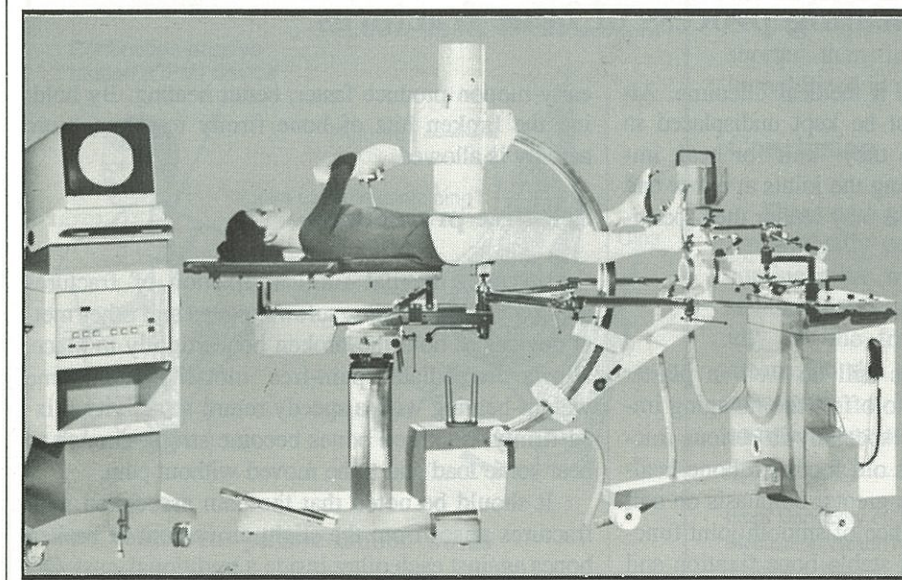
Modern techniques have improved the accuracy of pin placement. The orthographic-orthopaedic and fracture table (Fig. 7) permits easy use of an image intensifier throughout the procedure.

The historical development of hip-pinning has depended upon the need for improved methods of treating hip fractures as well as technological innovations, especially in X-ray and metallurgy. With further advances in technology, no doubt hip-pinning procedures will continue to improve. ■

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Fig. 7: Orthographic/orthopaedic and fracture table (AMSCO)



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About the author

Kim Cable, R.N., graduated from Mohawk College, Hamilton, Ontario. She is a recent graduate of the Operating Room Technique and Management Program, Hotel Dieu Hospital, Kingston, Ontario. Presently, she is a staff nurse, operating room, Ottawa Civic Hospital.

Canadian hip fracture statistics...

Estimated number of hip fractures in Canadians over age 50 in 1987:

Women - 13,193

Men - 4,610

Predicted increase in hip fractures in Canada in next 20 years, 70%:

Women - 22,922

Men - 7,846

Source: University of Manitoba's Sport and Exercise Science Research Institute, Winnipeg

See pg. 22 for description of study

Continuous passive motion, an innovative concept enhancing the healing process of bone fractures

Bone healing presents a medical dilemma. Although broken bones must be kept undisplaced in the correct position while they "knit" or heal, immobilizing them and keeping the joints at either end of the bone shaft motionless may render them permanently stiff or arthritic.

The new focus

While many fractures still do well in plaster casts, modern experts try to offset the ravaging impact of prolonged disuse, especially in serious fractures involving joints. The old focus on bone healing has been replaced by a greater emphasis on soft tissue repair and maintenance of smooth joint function. The new methods of stable bone fixation and

early motion produce faster, better healing. By holding the broken bits of bone firmly together, more activity is allowed.

Selective procedures

Stable, internal surgical fixation of fractures using a variety of pins, screws, plates and other metal devices to hold the broken bones tightly in place, allows immediate, pain-free mobility and some weight-bearing with a speedy return to activity. Fixed firmly, fractured bones become strong enough to bear some load and to be moved without pain.

It should be noted that the pain associated with fractures arises from the slight movement of broken bones against each other inside a traditional cast. Or-

thopaedic surgeons are much more selective today about which broken bones are set in plaster and which are treated by alternative methods.

"Gate control"

Continuous passive motion (CPM) is one such alternative in fracture care. Pioneered at the orthopaedic biomechanics laboratory at the University of Toronto, this innovation in fracture care uses a machine instead of the injured person's own muscles to provide motion - motion that is needed to stimulate the healing of damaged joints and tissues.

Over the past 18 years, a team of surgeon-scientists at the University of Toronto has demonstrated by numerous experimental investigations that if damaged joints are continuously, gently and passively moved, the cartilage may regenerate. Contrary to formerly accepted views, the concept of CPM for diseased and injured joints is an excellent stimulus for healing and regeneration of tissue. Experimental investigations on animals confirm that CPM, for about one week, day and night, right after injury or reconstructive surgery, promotes the regeneration of cartilage within an injured joint. It also promotes the repair of ligaments and tendons. Continuous motion devices that gently rock the healing part can painlessly and dramatically improve the rate of tissue repair and the ultimate strength of a healed joint.

Continuous passive motion

The absence of pain reported by people whose healing joints are moved may be explained by the

"gate control" theory of pain: the propagation of nerve impulses to the brain from the continuously moving injured joint "closes the gate," blocking the transmission of pain impulses.

After eight years of animal research, CPM was tried for human fracture care, using specially constructed motorized devices to move the damaged joint continuously back and forth in a slow, rhythmic motion, mimicking its natural movement.

The device is attached to the affected part of the leg or arm, hand or finger putting it through a predetermined range of motion. This motion is quite slow, one cycle per 45 to 60 seconds. Since it is mechanical, the patient is not required to work to move the joint. He or she can lie in bed, eat, read or sleep while the healing part is gently moved.

CPM devices are always set up immediately after an injury or an operation while the patient is still under anaesthetic. The therapy is usually maintained from 1 to 3 weeks, with day and night treatment.

This revolutionary method can be used for ankle, knee, hip, finger, elbow and shoulder injuries, or following reconstructive surgery of these parts. It is also used to promote the healing of septic arthritis (joint infection), synelectomy (surgical removal of the diseased joint lining), replacement or repair of torn ligaments and repair of tendons.

Enhanced healing

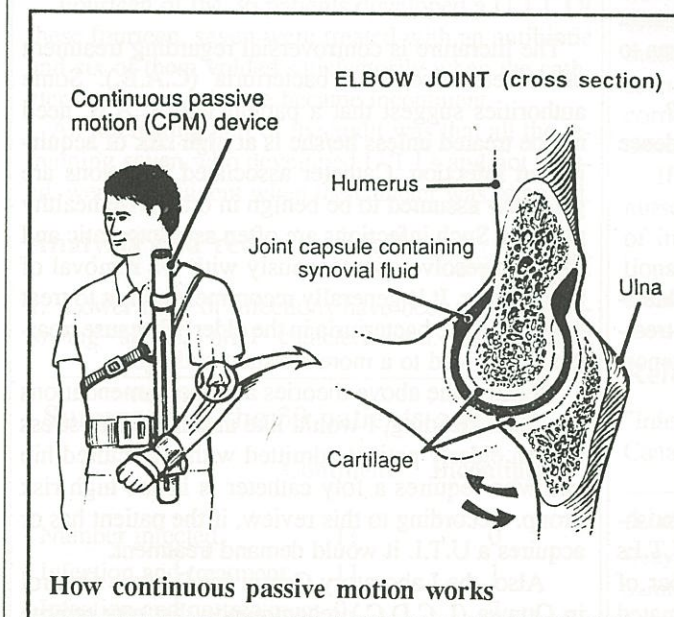
The greatest advances of CPM are enhanced healing of joint tissues, maintenance of early post-operative mobility and prevention of the joint stiffness that usually follows prolonged immobilization

in plaster. Wounds heal normally, the involved joints are less swollen and do not become stiff, resulting in a hospital stay shorter than is usual for the patients immobilized in plaster.

Conclusion

These new approaches to bone healing are gradually gaining acceptance and becoming more widely used. The accepted standard for fracture care in 1989 is to rigidly fix the fracture, often by surgical means, so the patient can ambulate and function at a level that minimizes the complications of disuse. ■

From University of Toronto Faculty of Medicine's "Health News," Volume 7, Number 2, April, 1989



How continuous passive motion works

Preventing UTI following fractured hip surgery

By Betty Robinson, R.N., I.C.O.

Active surveillance is the basis of any infection control program. Data collection and analysis of hospital infection statistics provide the necessary information to identify where problems exist. Once a problem is identified, the appropriate person then has the opportunity to take corrective action.

During a routine current chart review for infections, I became aware of a high incidence of urinary tract infections (U.T.I.) in patients that had undergone repair of fractured hips. Upon further investigation it became evident that:

1. the majority of these patients had foley catheter drainage post-op, and,
2. a number of the patients became incontinent after removal of the catheter. I noticed some urinary tract infections were treated and some were not. I began to wonder:
 - a. how often is incontinence related to a U.T.I.?
 - b. does treatment of the U.T.I. lower the incidence of incontinence?

Literature review

A literature review revealed many articles addressing the epidemiology of U.T.I.s, causes and treatment of U.T.I.s and management of incontinence. There was surprisingly little on prevention.

UTIs: prevention, causes, treatment

The urinary tract is the most common site of nosocomial infection in acute care hospitals. U.T.I.s account for more than 40% of the total number of such infections, affecting more than an estimated

600,000 patients per year in Canada. Policies for the management of the indwelling catheter have played a major role in decreasing the number of U.T.I.s, but infection is still a major concern.

The risk of acquiring a U.T.I. following catheterization depends on the method and duration of catheterization, quality of care and host susceptibility. Fifty percent of hospital patients having an indwelling urethral catheter for longer than seven to ten days, develop bacteriuria. Specific host factors associated with an increased risk of infection during or after instrumentation include: female sex, advanced age, and degree of underlying illness.

Controversial treatment

The literature is controversial regarding treatment of catheter-associated bacteriuria (C.A.B.). Some authorities suggest that a patient with C.A.B. need not be treated unless he/she is at high risk of acquiring an infection. Catheter associated infections are generally assumed to be benign in otherwise healthy patients. Such infections are often asymptomatic and likely to resolve spontaneously with the removal of the catheter. It is generally recommended not to treat asymptomatic bacteriuria in the elderly because treatment may lead to a more resistant pathogen.

Because the above theories and recommendations can be misleading, I would like at this time to stress that an elderly patient admitted with a fractured hip and who requires a foley catheter is in the high risk group. According to this review, if the patient has or acquires a U.T.I. it would demand treatment.

Also, the Laboratory Centre for Disease Control in Ottawa (L.C.D.C.) recommends that any remote

site of bacterial infection should be treated because such an infection increases the risk of wound infection. This recommendation supports the treatment of U.T.I.s in the elderly surgical patient.

Prevention vs. treatment

Today's focus in health care is on the quality of life. This article addresses a problem that affects the quality of life, particularly that of the elderly surgical patient. By writing this article, I hope to promote an interest in prevention rather than just treatment and management of urinary incontinence.

When I first decided to review patients' discharge charts, I had asked the record department for charts of patients who had hip surgery. I was given 12 total hip patient charts. I did not see the results expected. Over 50% did not have a catheter, and another 15% had I & O (intake and output) catheterization that was successful. Also, the average age of the patients having the elective hip surgery was 64, a group younger than what I had targeted for.

Hip fracture patients

Changing my focus, I audited the charts of 36 patients admitted with fractured hips. Of these, 30 met the criteria I was looking for; that is, a catheter in place at least five to 10 days post-op.

Five of the 30 patients had an infection present on arrival. Each was treated with an antibiotic and voided satisfactorily after the catheter was removed. Eleven had no infection when the catheter was removed, with all eleven voiding satisfactorily.

Fourteen of the 36 patients developed a U.T.I. Of these fourteen, seven were treated with an antibiotic and six of them voided satisfactorily when the catheter was removed. One became incontinent.

An interesting part of the audit was that all the remaining seven who developed U.T.I.s and not treated, were incontinent when the catheter was removed.

Analysis and recommendations

1. Lower rates of infections have been reported following single, brief catheterization. Although it

Summary of the 30 patients audited

	Continent	Incontinent
Number infected	11	0
Infection and treatment	11	1
Infection and no treatment	0	7

Through close surveillance, infections can be identified early, thus providing the necessary information for quick and appropriate treatment.

may not be suitable for all patients, I & O catheterization should always be considered.

2. Routine culturing is controversial and not generally recommended. For a surgical patient, however, a urine culture on first catheter insertion and then on removal is useful. Such a culture can identify an infection remote from the surgical site that, according to the L.C.D.C., should be treated.

It is also useful to identify a recently acquired infection. It was interesting to note all U.T.I.s present on admission were treated, whereas only fifty percent of nosocomial infections were treated. Of the treated patients, nearly 100% were continent after the catheter was removed, whereas those not treated all became incontinent. Recommendations:

1. A urine culture for C&S be taken on catheter insertion and removal from every surgical patient requiring a catheter;
2. U.T.I. that is present on admission or nosocomial U.T.I. should be treated. Age is not a factor.

Conclusions

There is no way of knowing if the quality assurance problem detected in these samplings is indicative of the general situation. The study could be criticized because of the small numbers. Also, the methodology used was not as rigid as that found in a scientific study. In any case, these results indicate a correlation between U.T.I.s and incontinence and, therefore, warrant further study.

If this review is substantiated through research, nurses can play an important role in the prevention of incontinence. Through close surveillance, infections can be identified early, thus providing the necessary data for quick and appropriate treatment. ■

References

"Infection Control Guidelines," Health and Welfare Canada, Tunney's Pasture, Ottawa, Ontario.

About the author

Betty Robinson, is the Infection Control Co-ordinator, Sarnia General Hospital and St. Joseph's Hospital, Sarnia, Ontario.

Vancouver to be site of 1991 World O.R. Nurses Conference

It was both a privilege and an honour to represent the Operating Room Nurses Association of Canada at the World Conference of Operating Room Nurses held in Vienna, Austria, Aug. 28 to Sept. 1.

It was with eager anticipation that I joined the other delegates who gathered at the Austria Centre. In total, fifty-seven countries were represented.

Keynote speaker at the opening ceremonies was Jean Reeder of the University of Maryland School of Nursing in Baltimore. Her presentation, entitled "Secure the Future," was an elaboration of a model for an international nursing ethic. The model was an interesting one, which had as its central focus the concept of fidelity surrounded by accountability, virtue and caring.

The presiding officer for the opening ceremonies was Carol Applegett, president of the American Operating Room Nurses (AORN). The opening also included a presentation of Viennese music by the world famous Vox Humana Chorus.

There were many topics of timely interest for delegates attending the conference: nursing shortages, crises in health care, reconstructive surgery, influencing practice through speaking and writing, perioperative research, infectious diseases, universal care, perioperative care of the elderly, managing for success, and numerous other educational/clinical topics for the perioperative nurse/manager.

Canadian participation

We were fortunate to have from Canada six presenters and two moderators. Our presentors were:

- Mary Knight Kubasiewicz - "Perioperative Nursing Research."
- Muriel Shewchuk - "Professional Accountability in the Team Setting."
- Micheline Chagnon-Lamarche - "Perioperative Care of the Elderly."
- Carol Lenox & Audrey Macdonald - "Confront-

ation, Negotiation and Mediation."

- Gloria Stephens - "Developments in Pain Management." The two moderators were myself and Pat Laplante, Royal Alexandra Hospital, Edmonton.

Specialty discussions

Each afternoon following the educational sessions, there were "operating room specialty discussion forums." These were informal gatherings, the purpose of which was to provide locations for O.R. nurses with similar interests and specialty areas of practice to assemble, share information and discuss areas of mutual concern. Even though translation services were not provided, these informal gatherings were popular and productive occasions. Use of hand and body language served us well.

International Night

A major highlight for the delegates attending the Sixth World Conference of Operating Room Nurses was the "International Evening." At this time delegates and exhibitors shared an evening of fellowship and fun. Many countries wore traditional costumes, while other countries wore special outfits for the occasion. The Canadian contingent stood out quite nicely in their red cobbler aprons and white alpine hats. A tradition at the International Night is to trade items with delegates from other countries. Canadian hats and aprons were in great demand.

It was truly a moving experience at the end of the evening when delegates joined hands with colleagues from countries around the world. The music to "We are the World" was played and the entire assembly sang the words.

An emotional closing

The significance of the International Night ceremonies became even more poignant during the final moments of the closing ceremonies. At this time,

"She experienced a week of peace, food, warmth and shelter, and freedom from the ever-present sound of gunfire and screaming..."

countries choosing to do so are provided the opportunity to make special presentations to the hosting country and the organizers of the conference, the AORN. I made such a presentation on behalf of the Operating Room Nurses Association of Canada. Representatives from other countries did likewise.

"A special week of peace"

The last person to make a presentation was a young nurse from Bierut, Lebanon. Through the interpreter she made it quite clear that she was indeed someone who felt blessed to have had the opportunity to attend this conference. She felt blessed in the sense that she experienced a week of peace, of food, warmth and shelter, and freedom from the ever-present sound of gunfire and screaming.

She apologized for having no gift to present. She felt that her gift was that she was able to attend.

As she bid us farewell, her closing remark was: "If we are fortunate to be alive in two years time, we hope to see you all at the next World Coinference."

The next (7th) World Conference of Operating Room Nurses is to be held in Vancouver, B.C., and on behalf of operating room nurses in Canada, I extend a sincere and warm welcome to nurses around the world who hope to attend in 1991.

After this welcome was extended to delegates, the entire Canadian contingent rose enmasse and gave a wave of friendship and welcome to the the audience.

I know that all operating room nurses in Canada will endeavour to do what they can to make all operating room nurses around the world feel welcome and at home in Canada during this next planned World Operating Room Nurses Conference.



Joan Donald
President

Operating Room Nurses
Association of Canada

- How much power and influence do you think O.R. nurses deserve in the workplace?
- What kind of future is in store for the OR nurse?
- What will the OR look like in the future? What are some of theories about the O.R. of the future?
- Government and medical doctors have considerable influence on this country's health care. Can nurses too attain a share of this influence?
- Can the recruitment-retention dilemma in the nursing profession be solved? How?
- The nursing shortage has certain ethical and legal implications. How can they be dealt with?
- Can a better system of communication be created between the nurse and physician?

- Are you satisfied with what you know about the hypothermic patient in the operating room?
- Have you had a chance lately to see what's new in the medical/surgical products field?
- What will the nurse in the 21st Century be like?
- What is the Ilizarov?
- Have you ever attended a California Tacky Beach Party? When's the last time you did something tacky (on a conscious level) and really enjoyed doing it?
- Do you want to have an "affair to remember"?

In order to obtain answers and more information about these and other questions, turn the page

Tentative Agenda

11th National O.R Nurses Conference

Harbour Castle - Westin Hotel

Toronto, Ontario, April 2 to April 6, 1990

Sunday, April 1, 1990

1600 - 1700 Pre-registration
2000 - 2230 Get-together Cocktail Party

Monday, April 2, 1990

0700 - 0815 Registration
0830 - 0915 **Opening Ceremonies**
0915 - 1000 Keynote Speaker
(Josephine Flaherty)
"Power and Influence in Nursing...
Is it a Desired Goal Today?"
1000 - 1030 Coffee/break
1030 - 1130 O.R.N.A.C. Information Meeting
1130 - 1135 **Opening of Exhibits**
1135 - 1430 Viewing of Exhibits/Lunch
1500 - 1630 1. Are You Future Tense?
(Karen Fraser)
2. The New Theoretical View of
the O.R. (Gerte Torres)
3. Use of the Ilizarov in Children
and Adults (Drs. D. and R. Bell)

1830 - 2100 Ethicon Night

Tuesday, April 3, 1990

0700 - 0815 Registration
0830 - 1000 1. How Nursing Can Influence the
Health Care System (I. Milton)
2. Personal Financial Planning for
the Nineties (Alf Schmocker)
3. Heart Transplants (Margo Fretz,
Dr. A. Menkis, Dr. H. Rosenberg)

1000 - 1030 Coffee/Break
1030 - 1130 1. The Recruitment-Retention
Dilemma (Audrey Macdonald)
2. Ethical Decision Making and the
Nursing Shortage (M. Burgess)
3. Nurse/Physician
Communications
(Jane Finan, Dr. B. Taylor)

1130 - 1430 Viewing of Exhibits/Lunch
1500 - 1630 1. Hypothermia in the O.R.
(Dr. D. Chung)

2. The Legal Implications of the
Nursing Shortage
(Fay Rozovsky)
3. Dealing with Stress
(Marian Pitters)

2000 - 2230 **California Tacky Beach Party**

Wednesday, April 4, 1990

0700 - 0830 Registration
0830 - 1000 1. O.R. Nurse Personalities
(Dr. Brian Little)
2. Introduction to Nursing
Research (Marg Fitch)
3. Management of Pediatric Cranio-
Facial Problems (Dr. J. Posnick)

1000 - 1030 Coffee/Break
1030 - 1130 1. Arthroscopic Assisted Cruciate
Ligament Repair (Anna Hales)
2. O.R. Research Paper (Touchette,
Wood, Lightburn, and Calpito)
3. Multiple Birth Experience
(Dr. Paul Bernstein)

1130 - 1430 Viewing of Exhibits/Lunch
1500 - 1630 1. Protecting Women's Rights
(June Callwood)
2. The Future of O.R. Nursing
(Muriel Shewchuk)
3. Orbis-Mobile Eye Surgery
Unit (Dr. Jeff Hurwitz)

1900 - 2000 **Exhibitors' Cocktail Party**
2000 - 0100 Dinner/Dance (Black Tie)
"An Affair to Remember"

Thursday, April 5, 1990

0700 - 0830 Registration
0830 - 1000 1. Pro-Nurse
(M. Chenervet)
2. Safe Practices in the O.R.
(Gloria Stephens, Carol Goldman,
Dr. P. Cruse)
3. Repair and Growth in the CNS -
Surgical Implications
(Dr. M. Rathbone)

1000 - 1030 Coffee/Break
1030 - 1130 1. Pro-Nurse (Cont'd)
2. Nursing Power
(M. Campbell)
3. Stone Wars - 1990
(Dr. K. Psihramis)
1130 - 1430 Viewing of Exhibits/Lunch
1500 - 1630 1. The 21st Century Nurse
(I. Capanolla)
2. Florence Nightingale
(Dr. P. Cruse)
3. Current Concepts in Facial
and Neck Cancer Extirpation
and Reconstruction
(Dr. J. Freeman, J. Blatherwick)
2000 - 0100 Evening Event (TBA)

Friday, April 6, 1990

0730 - 0845 Registration
0900 - 1030 Closing Session
Women's Equity in the Health Care
System (Stephen Lewis)
1030 - 1100 Coffee/Break
1100 - 1200 Closing Ceremonies

Registration Information

Five-day Rate - \$200.00
(Does not include Dinner/Dance)
Daily Rate - \$50.00
Dinner/Dance
✓ Delegate - \$40.00
Guest - \$50.00

Pre-registration deadline - March 10, 1990

Registration enquiries directed to...

Audrey Macdonald
Publicity Convenor
2301 Mountaingrove Avenue
Burlington, Ontario L7P 2H8
(416) 586-4401

Exhibitor enquiries...

Valerie Shirreff
Operating Room
Mississauga Hospital
100 Queensway West,
Mississauga, Ontario L5B 1B8
(416) 786-848-7628

ARTHROSCOPY PROGRAM FOR O.R. NURSES

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Course Instructor:

Marlene Muir, R.N.

Program Highlights...

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going arthroscopic surgery
- Anaesthetic techniques
- What to purchase
- Care, handling and sterilization of instrumen-
tation and equipment
- Normal/abnormal knee pathology
- Skills lab - models and videos
- Trouble shooting the video system
- Observation of O.R. arthroscopy procedures

Location:

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43 Wellesley St. East
Toronto, Ontario
M4Y 1H1

Course Dates:

January 22-23
February 19-20
March 19-20
April 16-17
May 14-15

Course Fee:

\$175.00 per nurse -
includes breakfast, lunch, and dinner
on evening one. Does not include hotel.

Registration:

To register, phone or write: **Bette Hales,**
Zimmer of Canada Limited,
2323 Argentia Road, Mississauga, Ont.
L5N 5N3 (416) 858-8588



Hip fractures projected to double over next twenty years

A 70% increase in the number of hip fractures is predicted in the next 20 years, according to projections based on data from the prairie provinces.

Dr. Alan Martin, a researcher with the University of Manitoba's Sport and Exercise Sciences Research Institute, said the projections are important to those concerned with health care cost projections.

Dr. Martin estimated that in 1987 there were 13,193 hip fractures among Canadian women 50 years of age and over, and 4,610 hip fractures among men of a similar age. These numbers are expected to increase to 22,922 for women and 7,846 for men in the next 15 years, or by the year 2005. Dr. Martin believes that these projections are conservative.

Using hospital discharge data, Dr. Martin and his

colleagues studied the incidence of hip fractures in Manitoba and Saskatchewan to determine if Canada had been experiencing the same increase in the annual incidence of hip fractures among the elderly that was documented in the United States and certain European countries: Britain, Denmark and Sweden.

Osteoporotic fractures

The increases in the United States and in Europe are greater than would be expected by the increase in the proportion of the population above 50 years of age, Dr. Martin said. "We looked at people over 50 because we were not interested in trauma, but in osteoporotic fractures."

Overall, the incidence of fractures among women more than 50 years of age increased 60% during the 13-year study period; fractures among men in the same time period increased 42%. When the data was examined for 5-year age groups above age 50, there was in each case an increase greater than that predicted from the increase of the population in that age group.

"The older you get, the longer you live, the more bone you lose and the more likely you are to suffer any kind of osteoporotic fracture, particularly a hip fracture, which is characteristic of the very old."

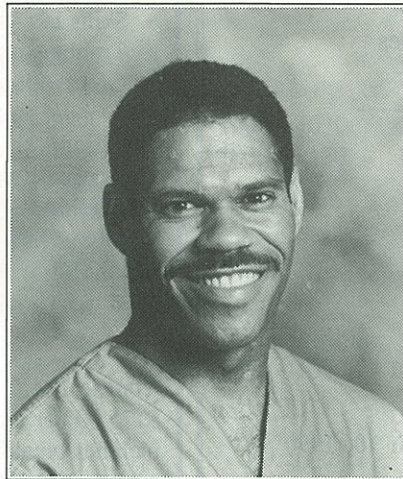
Dr. Martin speculated that the increase in the incidence of hip fractures, particularly among the elderly, could result from the decrease in activity.

"One might assume that the decrease in physical activity has resulted in a trend toward lower bone density through the decades. This could then result in an increase in the number of fractures." ■

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- May 1990 to December 1990

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Sheila Bothamley
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X1A 2N1

The Dr. Everett Chalmers Hospital Has a Vacancy For a Senior Clinical Nurse Surgical Suite

The successful applicant will be expected to assume the nursing leadership in the surgical suite, which consists of nine operating theatres.

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Apply including resume:



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Dr. Everett Chalmers Hospital
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Fredericton, NB
E3B 5N5

Refer to Competition #RNOR-2-89

National Nurses Week, May 7 - 12

National Nurses Week is to be held from May 7 to May 12. The theme for this year's special week is "Nurses and the Environment."

Annual CNA Meeting slated for Calgary

Readers may also like to know that the Annual Meeting and Convention of the Canadian Nurses Association will be held in Calgary, Alberta, June 24 to 27.

Most of us like our health care system

A recent survey shows that the majority of Canadians actually like their health care system. Unlike the United States, people there (89%) feel their system is 'fundamentally flawed.' In the U.K., 70% feel that their system requires fundamental changes, but most prefer their system to either Canada's or the U.S. Given the choice, of the thousands of U.S. respondents, 1 in 2 would like to swap their present system for another country's - preferably Canada's.

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Survey recommends day surgery be encouraged, upgraded

A survey recently released by the Canadian Hospital Association (CHA) recommends that day surgery units be encouraged and existing ones upgraded.

Called "Surgical Day Care In Canada - A National Survey of Programs in Acute Care Hospitals," the survey was embarked upon in 1987 and 1988.

The report concludes that day surgery units are a cost-effective use of hospital facilities, and that provincial government health organizations should develop incentives for the expansion of such units.

A day surgery unit is defined as "a hospital-based service in which scheduled elective surgical, diagnostic and/or therapeutic procedures are provided to patients who are admitted and discharged the same day through organized programs with defined pre-and post-operative procedures."

Highlights of the survey include:

- 59 percent of all acute care hospitals in Canada currently have some type of formalized day surgery;
- a further 15 percent of acute care hospitals do surgery on a daily basis;
- most day surgery programs in Canadian hospitals have been in existence for five years or longer;
- the majority of day surgery units in Canada are integrated, which means they share some operating

rooms and space with other units in the hospital; (however, some hospitals may have some "dedicated" facilities, i.e., areas exclusively for day surgery);

- 62 percent of the hospitals surveyed (N=350) performed at least two day surgery procedures for every in-patient procedure;
- the most noteworthy reason for a day surgery service is financial - there are considerable cost-savings;
- the operation of a day surgery unit does not require costly, 24-hour staffing and other services;
- established day surgery units, unlike extended hospital in-service, does not disrupt family life or employment obligations on the part of the patient;
- day surgery services diminish the risk of patients contracting nosocomial infections;
- the report also recommends that many procedures currently performed on a hospital in-patient basis could be considered for day surgery;
- the report also recommends that pre-admission preparation should be upgraded in some existing day surgery operations: "Adequate preparation before and after surgery is needed to meet the physical, social and psychological needs of all patients since the throughput is rapid."

The top five surgical day care procedures in Canada: cystoscopy/ pyelogram; endoscopy/GI; dilation/ curettage; teeth removal/restoration; skin excision.

Calendar of Events

National O.R. Conference

April 2 - 6, 1990, Toronto, Ontario:

11th National Operating Room Nurses Conference, Harbour Castle (Westin) Hotel. Delegates contact Audrey Macdonald, Operating Room, Mount Sinai Hospital, 600 University Avenue, Toronto, Ontario M5G 1X5. Exhibitors contact Valerie Shirreff, Operating Room, Mississauga Hospital, 100 Queensway West, Mississauga, Ontario L5B 1B8.

February 7 - 9, 1990, Calgary, AB: Quality of Nursing Life Conference: "Partners in Innovation;" Calgary Convention Centre. (Contact Jannice Moore, Director, Education Services, Alberta Hospital Association, 10009 - 108 Street, Edmonton, Alberta T5J 3C5. Telephone: (403) 498-8403; FAX: (403) 498-8465).

February 16 - 17, 1990, Windsor, Ontario: 4th Annual Conference, Windsor and District Operating Room Nurses Association, Hilton International Hotel. (Details: Darlene Beaudet, Windsor Western Hospital, Operating Room, 453 Prince Road, Windsor, Ont. N9C 3Z4 (519) 257-5178).

March 18 - 23, 1990, Houston, Texas: 37th Annual AORN Congress, the George R. Brown Convention Centre. (Contact AORN Meeting Services, 10170 East Mississippi Ave., Denver, Colorado 80231; (303) 755-6300).

October 18 - 20, 1990, Gander, Nfld: 11th Annual Conference, Newfoundland & Labrador O.R. Nurses Association, Hotel Gander. (Exhibitors contact Henry Norris, James Paton Memorial Hospital, 125 Trans Canada Highway, Gander, Newfoundland A1V 1P7).

May 5, 1990, Windsor, Ontario: 11th Annual Symposium, Malignant Hyperthermia Association, Hotel Dieu Hospital, Windsor. (Contact Juliette Beaudet, Reg. N., Hotel Dieu Hospital, 1030 Ouellette Avenue, Windsor, Ontario N9A 1E1. (519) 973-4421).

September 28 - 30, 1990, Regina, Sask.: 6th Annual Conference, Saskatchewan Operating Room Nurses Group. (Contact Ginny Mielke, 106 Lockwood Road, Regina, Sask. S4S 3G2. Home: (306) 584-0692, Work: (306) 359-2325).

Changing image of the O.R. nurse to be examined during the Windsor and area O.R.Nurses Conference

The Windsor and District Operating Room Nurses Association will be holding its 4th Annual Conference on Friday and Saturday, February 16 and 17, 1990. As with previous conferences, the Hilton International Hotel and the adjacent Cleary Auditorium will be the locale. Besides the educational/clinical program, there will be an exposition of medical-surgical products, and the Saturday luncheon will feature a walk-thru fashion show.

The theme of the conference is "Changing the Image of the O.R. Nurse." Conference organizers have scheduled guest speakers and arranged an agenda in keeping with this theme.

Speakers to date include:

Carol Lenox, Mississauga Hospital:
"The many jobs of the O.R. nurse."

Gerry Richardson, Canada Life Insurance:
"Financial management."

Dr. Laurie Campbell:
"Homeopathic medicine and laser technology."

Carole Bertuzzi-Luciani:
"Humour in the workplace."

See "Calendar of Events" section for more details.

General Journal Information

Canadian Operating Room Nursing Journal, copyright, 1983, is published six times a year (February, April, June, September, October/November, and December) for operating room nurses and related surgical nursing personnel across Canada.

Canadian Operating Room Nursing Journal is indexed in Index Medicus, the Cumulative Index to Nursing and Allied Health Literature, and the International Nursing Index, United States National Library of Medicine, Bethesda, Maryland.

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Canadian Operating Room Nursing Journal is published by Health Media Incorporated, Suite 202, 214 Merton Street Toronto, Ontario M4S 1A6

It's not what you stand for but what you stand on!

It may not be how you stand at the operating room table, but what you stand on that can determine the amount of stress and fatigue experienced, according to a study at the Center of Ergonomics at the University of Michigan.

Researchers, reporting in the March 3 issue of the *Journal of the American Medical Association*, stated they tested different floor types on a handful of employees at a Ford Motor Company plant who stand during their entire workshift. The floor types ranged from solid concrete to matting of varying thickness.

Ratings of perceived hardness and discomfort in the feet, ankles, legs, and back were obviously highest for concrete and lowest for the soft, thicker mats.

However, general fatigue ratings were higher with flooring that was too soft. Also, leg fatigue correlated with general fatigue regardless of floor type.

Other factors that were considered were the type of shoes worn, the task being performed, length of time standing, and individual worker characteristics such as general health, job satisfaction and conditioning. ■

Pre-op hair removal... an unscientific ritual

A study of more than 300 surgical patients has shown that shaving did not make the skin more sterile and did not lower the rate of infection, according to a report in the March 3rd issue of the *American Medical News*.

The study, which was conducted at the George Washington University School of Medicine and Health Sciences, consisted of four groups of patients. Three of the groups had hair removed prior to surgery either by shaving, clip-

ping, or chemically. The fourth group had no hair removed.

Results showed that no statistically significant differences were found between the four groups.

An investigator quoted in the study, a surgical nurse co-ordinator, said that preoperative hair removal is a ritual that does not have any scientific bases. ■

Though it still baffles us, knowledge of SIDS grows

It is considered one of the most pathetic and apparently preventable of all causes of death among infants, yet SIDS (sudden infant death syndrome) still baffles the experts, in spite of new insight into the disease.

In a recent issue of the *Mayo Clinic Health Letter* (April, 1989), cigarette smoking by pregnant women is most notably linked to the disorder.

Other probable causes of SIDS focus on the theory that a problem may have existed before birth. Some of these problems or risk factors include:

- maternal drug abuse;
- bleeding during pregnancy;
- position of the placenta in the mother's uterus;
- multiple fetuses (each fetus shares the same placenta and may not receive sufficient blood);
- an interval less than one year between pregnancies (the lining of the uterus, on which the placenta forms, needs about twelve months to recover between each pregnancy).

Over the past ten years of research, a pattern of key characteristics has emerged in babies who may be most vulnerable to SIDS:

- usually occurs when an infant is between three weeks and seven months old;
- occurs almost always when the child is sleeping;

- is more common among boys;
- lower economic groups experience SIDS more frequently;
- occurs more often in families with several children;
- occurs more often with premature infants (or in families which have had premature children);
- it is not considered hereditary;
- parents who have lost a child to SIDS face a slightly higher risk of having another die of SIDS;
- the risk of SIDS appears to be higher in colder weather;
- SIDS is the leading cause of death in infants between one week and one year of age. ■

Romantic facts to ponder as we fall asleep tonight

The Romans valued their numerous slaves to such an extent that their owners insisted that they sleep on their right side. The rationale was that the heart, sloping as it does toward the left, is damaged if one sleeps on the left side. No one that we have heard about has ever tested this hypothesis, possibly because today not much credibility is attached to Roman physiology.

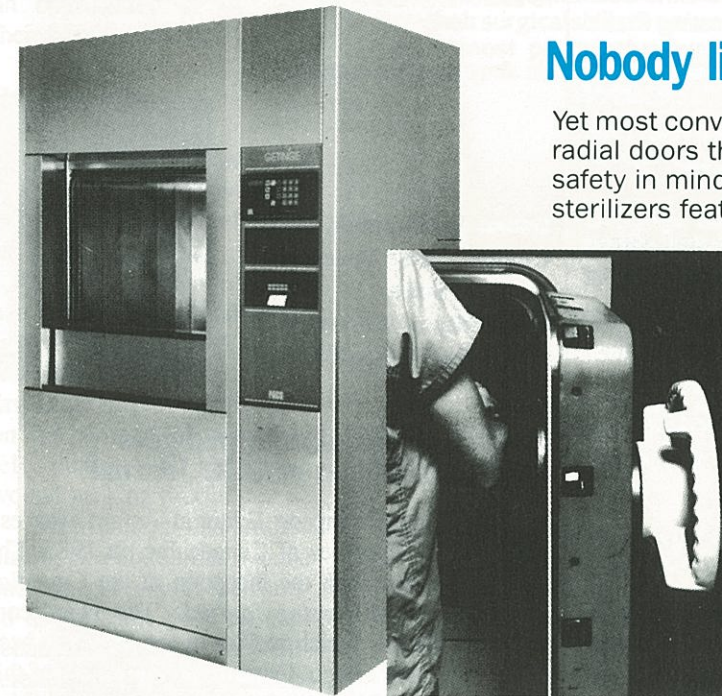
But let's not underestimate Roman science and engineering. It was nothing to scoff at. For instance, did you know that, architecturally, the Roman Coliseum is not significantly different from the Skydome in Toronto, with its retractable roof and the claim that it will last at least 400 years.

The Roman Coliseum, still in existence after 2000 years, not only had a greater seating capacity, it also had a retractable roof of canvas that could be erected on hot, sweltering days by a corvee of healthy slaves who slept on their right sides.

After all is said and preserved about Roman technology, their interest in sleeping positions may not be all that far fetched. ■

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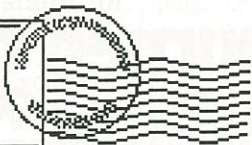
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Letters to the Editor



November 1, 1989

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At the opening ceremonies of the 12th Annual Provincial Conference of the Operating Room Nurses Association of Alberta held in Medicine Hat, Alberta, in mid-October, Dave Paterson, President of Surgikos of Canada, presented me with the 1988 Drake/Thompson Memorial Editorial Award.

This award holds particular significance in that it is a memorial tribute to Chris Drake and Gregg Thompson, two senior executives of Surgikos of Canada, who tragically lost their lives in an airline disaster in 1983 while in the line of duty for their organization and the health care community.

Surgikos of Canada is to be congratulated for commemorating the contributions of these two highly respected senior executives. Their memory will live on through the Surgikos Editorial Award.

We, as operating room nurses, are fortunate to have the incentive of this award to encourage communication, and the sharing of ideas and experiences with each other through the medium of the *Canadian Operating Room Nursing Journal*. It is through the co-operative efforts of Dave Paterson and Surgikos of Canada, Muriel Shewchuk and the ORNAC Editorial Awards Committee, and the Editorial Staff of the *Canadian Operating Room Nursing Journal* that this prestigious award is possible. To these organizations and individuals, a special thank you: to the Editorial Awards Committee for the difficult task of reviewing the editorial submissions and selecting the annual editorial award winner; to Surgikos of Canada for promoting, through this award, the communicating, sharing, education and advancement of operating room nurses

across Canada; and, to our own fine publication, the *Canadian Operating Room Nursing Journal* for providing the medium through which all operating room nurses in Canada share and benefit.

I would also like to express my appreciation to the Operating Room Nurses Association of Canada (ORNAC) and the Operating Room Nurses of Alberta (ORNA) for their participation in this award. A special "thank you" to the Alberta association Planning Committee of the 12th Annual Conference for providing me with the opportunity to share my moment of glory with colleagues, and allowing me to share in a presentation at this conference.

In deepest appreciation,

Donna Prokopczak,
Clinical Nurse Specialist,
Surgical Suite,
University of Alberta
Hospitals, Edmonton



History of Surgikos award goes back to inception of O.R. Journal

The Drake/Thompson Editorial Award was established by Surgikos of Canada Inc. in 1983. The award coincides with the inception of the *Canadian Operating Room Nursing Journal*. The award consists of a plaque, which resides at the Surgikos head office in Peterborough, Ontario, and a replica of this plaque along with a cash award of \$2,500, which goes to the recipient.

Adjudicated and administered by the Awards Committee of the Operating Room Nurses Association of Canada, competition is open to all operating room nurses, technicians, staff nurses, instructors and students, full or part time, engaged in some area of operating room nursing instruction, and who have submitted an article which has been published in the *Canadian Operating Room Nursing Journal*. There have been six Award winners to date:

1988, Donna Prokopczak, Edmonton, Alberta;
1987, Mary Kubasiwicz, Winnipeg, Manitoba;
1986, Joan Ball, Toronto, Ontario;
1985, Jerry Rudney, Winnipeg, Manitoba;
1984, Jean Savickis, Toronto, Ontario;
1983, Joanne Teskey, Toronto, Ontario.



OR news

Turn on the music... tune out the pain!

Music appears to enable surgical patients to "tune out" pain. A study last year out of the University of Western Ontario in London has shown that patients feel less pain during such unpleasant surgical procedures as abdominal wound packing when given an opportunity to listen to their favourite music.

Pain Societies

The study was presented in Toronto during a joint meeting of the Canadian and American Pain Societies.

In the study, 26 adults who had undergone abdominal surgery were studied to see what effect listening to their favourite music would have on the amount of pain they felt during an abdominal wound packing procedure.

Each patient was studied during two abdominal wound packing procedures performed at the same time on consecutive days. The only difference: one day they got music; the other day they didn't.

Analgesics administered

The patients were given an analgesic prior to the procedure, whether or not they were also listening to music.

Pain was measured using the sensory, affective and total Pain Rating Indexes (PRI), and the Present Pain Intensity Scale of the McGill Pain Questionnaire and Pain Ladder.

Patients' systolic blood pressures, diastolic blood pressures and pulse rates did not

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differ significantly when they listened to music. However, when they were outfitted with a cassette recorder, a pair of headphones and a

tape of their favourite tunes, patients had significantly lower scores on the sensory and affective PRI rating scales.

Medical/surgical supply companies support your O.R. journal

The publishers and the thousands of readers of the *Canadian Operating Room Nursing Journal* wish to thank the medical/surgical supply companies whose advertising confidence in our journal make it possible for this publishing venture to continue year after year. Without the support of the following companies, there would not have been a journal in 1989.

- Abbott Laboratories
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- Squibb Canada Inc. (ConvaTec)
- Surgikos Canada Inc.
- Tecnol Inc.
- Zimmer of Canada

Thanks also to those hospitals whose recruiters advertised for operating room staff in our journal.

11th Annual Malignant Hyperthermia Symposium to be held in Windsor

The Malignant Hyperthermia Association of Canada has selected the city of Windsor, Ontario for its 11th Annual Symposium to be held May 5th, 1990, at Hotel Dieu Hospital. The Windsor and District Operating Room Nurses Association will be assisting in the sponsoring of this annual event.

For more details and registration, please contact:

Juliette Beaudet, R.N.
Hotel Dieu Hospital, Operating Room
1030 Ouellette Avenue
Windsor, Ontario N9A 1E1
(519) 973-4421 - work
(519) 728-2341 - home

Book Review

Title - *Asepsis, The Right Touch*
Something Old is Something New

Author - Sue Crow, R.N., M.S.C., C.I.C.
Publisher - The Everett Companies, Publishing Division, 813 Whittington Street, Bossier City, Louisiana 71112

It is unusual for the writer of any work to have the grit to describe his or her endeavours as "that which is indispensable;" yet, that's just what the author of *Asepsis, The Right Touch* said in her Epilogue when she wrote: "The *sine qua non* of asepsis has been outlined in this book. The fact is, she's justified in making the statement - it should be considered indispensable.

An infection control practitioner with myriad experiences, Sue Crow has written a book for all health care workers that takes them back to the basic foundation of infection control practice, namely, aseptic technique.

The first three chapters of this ten chapter, 186-page book introduce the reader to the components of the enemies of asepsis. These pages not only tell the reader how to stop the enemies, they also detail some of the moral and ethical issues involved.

Chapters four through nine describe medical and surgical asepsis with guidelines for disinfection and sterilization.

The last chapter, "Cut the costs - count the ways," is devoted to 101 methods and procedures that can be utilized to cut costs while still maintaining effective infection control. At the end of each chapter is a summary of the important points that have been covered and a list of suggested readings pertinent to that chapter. Each chapter is also replete with cartoon sketches that reinforce the messages and concepts being communicated.

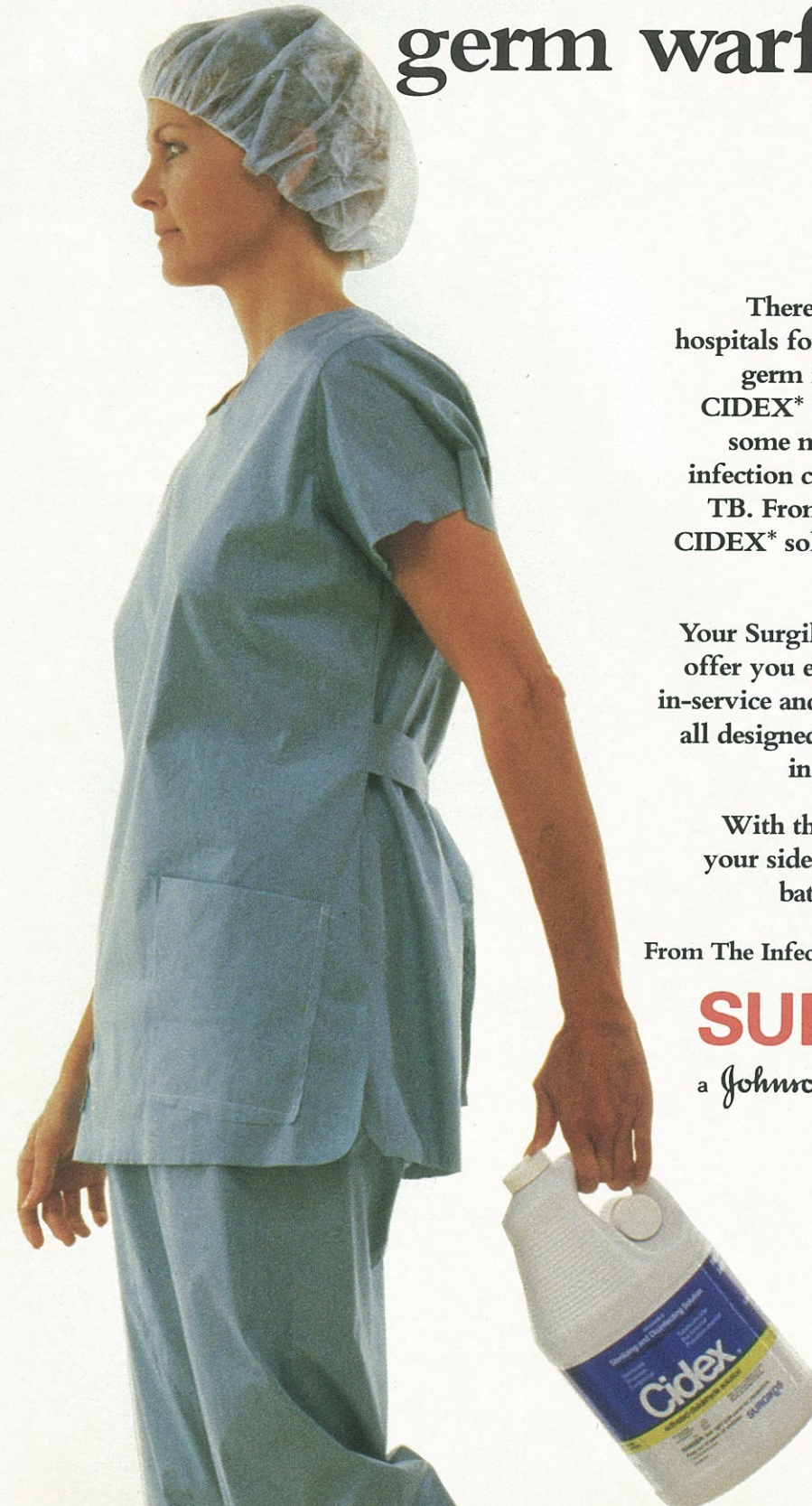
Every chapter is written with a common-sense approach: questions are posed and answered, and problems encountered by every I.C. practitioner are dealt with. The author's 20 years experience in infection control is evident: she has the knack of separating the nuggets of asepsis technique from the dross. In short, you don't find any aspect of infection control discussed that is not precise and pertinent to patient care and safety.

This book would be a highly useful library addendum for infection control practitioners, for those involved in quality assurance, and anyone required to write I.C. procedures and guidelines. Besides being a handy reference book, nursing educators will find it an excellent and practical source text for themselves and their students.

Infectious disease is a timely topic of discussion in virtually every area of health care today - AIDs, hepatitis, herpes, resistant bacteria, etc. *Asepsis - The Right Touch* is a timely and substantive answer that takes us back to the much needed basics - and beyond.

Editorial Staff, CORNJ, 20/11/89

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