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Traditional West Coast Native Medicine

SUMMARY

An important part of the complex culture of the Native people of Canada's Pacific coast is the traditional system of medicine each culture has developed. Population loss from epidemics and the influence of dominant European cultures has resulted in loss of many aspects of traditional medicine. Although some Native practices are potentially hazardous, continuation of traditional approaches to illness remains an important part of health care for many Native people. The use of "devil's club" plant by the Haida people illustrates that Native medicine has both spiritual and physical properties. Modern family practice shares many important foundations with traditional healing systems. (*Can Fam Physician* 1988; 34:1577-1580.)

Key words: Native health, Native medicine, traditional healing systems

RÉSUMÉ

La tradition médicale développée par chacune des cultures fait partie intégrante de la complexité culturelle des autochtones canadiens vivant sur la côte du Pacifique. Les décès attribuables aux épidémies et à l'influence des cultures européennes dominantes a entraîné la perte de nombreux aspects de la médecine traditionnelle. Bien que certaines recettes autochtones soient potentiellement néfastes, la poursuite des approches traditionnelles à la maladie occupe encore une place importante au niveau des soins de nombreux autochtones. L'usage de la plante connue sous le nom de « devil's club », du nom latin *oplopanax horridus*, sorte d'arbuste épineux à fleurs blanches et à baies rouges, par la tribu des Haidas illustre bien les vertus spirituelles et physiques de la médecine autochtone. La pratique familiale moderne et les systèmes de guérison traditionnels ont en commun de nombreux principes de base qui sont les mêmes.

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THE BEAUTIFUL and rugged coastline of northwestern British Columbia is home to several Native groups, ranging from the Kwakiutl who live on northern Vancouver Island and the central coast, to the Haida people who occupy the Queen Charlotte Islands and southeast Alaska. These peo-

ple are descendants of the Northern Boreal population who crossed the Bering land bridge from Asia approximately 30 000 years ago.¹ Over many centuries their civilizations evolved into sophisticated and complex cultures. Rich natural resources in the area allowed development of a distinctive language, complex art forms, mythology, and systems of medicine.

Little remains of some aspects of these rich cultures; the languages and oral traditions are especially in peril. In the absence of a written Native language and with the direct competition of compulsory English-language education for Native children in residential schools, the linguistic heritage of these people has been severely damaged. With the loss of the language there has been a concurrent loss of many traditional practices in medicine. These losses continue in the present era with the death of each Native elder whose memory contained one further remnant

of knowledge or history which is now lost.

Fortunately, some aspects of the traditional cultures have survived and are actually experiencing a rebirth. The artistic accomplishments of modern Haida masters such as Bill Reid and Robert Davidson have helped the Haida people to maintain a sense of identity and pride that extends far beyond the art itself. Recent political success in helping to preserve the South Moresby area as our newest National Park also augurs well for the future of Haida culture, as their traditional homeland may now be at least partially protected from the ravages that accompany intensive resource developments such as clear-cut logging.²

Unfortunately, most aspects of traditional Northwest coast medicine remain in danger of loss or extinction. There is renewed interest in traditional medicine practices among the younger people, however, since they are recog-

nizing that this aspect of their cultural heritage is important in redefining their Native identity.

When the Spanish explorer Juan Perez sighted Langara Island off the northwest coast of the Queen Charlottes in 1793, he could scarcely have foreseen the devastating consequences of contact between the European cultures and Native groups. The lure of a lucrative trade in sea-otter pelts led to increasing contact. This development, in turn, led to conflict and, eventually, to exposure of the Native groups to the ravages of several epidemics. The smallpox epidemic that originated in Victoria B.C. in 1862 was especially devastating as canoe loads of infected Native people, forced by the government authorities of the day to leave their campgrounds, returned northward spreading the contagion as they travelled.³ The mortality caused by this epidemic reached staggering proportions. The Haida village of Tanu, for instance, is reputed to have lost 920 of its 1000 residents over a brief three-year period.³ Visiting the site of this abandoned village today fills one with an extreme nostalgia and sadness, as if one shares the grief of the 80 survivors who packed their belongings and struggled northward to resettle eventually in Skidegate village.

The staggering losses suffered by the population destroyed the confidence, prestige, and power of the traditional healers or shaman. At Masset village in the northern Queen Charlottes, the Anglican missionary Collison survived an epidemic of smallpox by vaccinating himself and some of the Haida. The advantage of vaccination and the other aspects of European medicine soon became apparent to the Native people.⁴ In some areas, such as the Queen Charlottes, the shaman virtually disappeared. Their age-old remedies and practices were completely discounted in the headlong rush toward adopting the new powerful culture of the missionaries and settlers of European descent. Claude Levi-Strauss, in his insightful essay, "The Sorcerer and His Magic" described the necessary group consensus which must exist if shamanism is to succeed.⁵ The loss of faith in traditional healers and traditional systems of curing among Native populations led naturally to an increasing reliance on the Western or European scientific system of medicine.

The pre-occupation of Western or scientific medicine with the separation of mind from body and with a focus on the individual rather than the group, has done nothing but further distort our view of traditional systems of medicine, which we see as based on superstition or magic. Traditional healers who use age-old herbal remedies may be practising on sound principles, based on careful observation of the effects of plants or other medicinal substances used with large numbers of patients. Such empiricism, even if it does span centuries of experience, is still discredited by our modern technological medical system. There is a tendency to discount all unproven treatments as "unprincipled", and to relegate traditional healers to the realm of "medical quackery".⁶ This tendency leads to two important questions:

- Is there still an important place in modern Canada for traditional Native medicines?
- Can an ethical, professional, and scientific Canadian family physician accept traditional medicine systems as legitimate and important for many Native patients?

During 10 years of family practice on the Haida or "Old Masset" reserve on the Queen Charlottes, I came to the view that traditional Haida medicine was not only widely used, but also that it was valid and important for many Haida patients. Far from being "quackery", the traditional system has many features which are congruent with modern family medicine, and which we might well emulate. Furthermore, the failures of modern scientific medicine, resulting from over-reliance on technology and a consequent impersonal or mechanical approach to illness, virtually guarantee the survival of the practices of traditional medicine among Native patients.

There is no doubt that some Native remedies and practices are potentially hazardous. In my practice at Masset, I observed severe illness caused by an overdose of the herb Indian Hellebore (*Veratrum viride*; "Gwaayka" or "Skookum Root" in Haida). The veratrum alkaloids contained in the highly regarded traditional medicine can cause marked hypotension, to the point of stupor and collapse.⁷

On some occasions, traditional treatments may even prove fatal. Jilek has described the widespread criticism of

the Spirit Dance ceremonial practised by the Coastal Salish people in southern British Columbia after three accidental deaths were related to the rigorous activities of these rites.⁸ The *Victoria Times Colonist* recently reported that a resident of Chemainus, B.C., had won a B.C. Supreme Court order restraining the traditional Coast Salish spirit dancers from forcing him to "become part of a centuries-old ritual that can prove deadly".⁹ The same report also described the reactions of police, medical doctors, and the local coroner to the death of a man on February 12, 1988, at the Clem-Clem longhouse near Duncan, B.C. Although the initiate may have died as a result of these ceremonies, such a death is not "considered murder [by the RCMP] under those circumstances".⁹ The coroner described his role as "helpful", stating "We don't want the Native people to feel the white community is holding them up to shame or knocking them down."⁹

Despite the tragedy of these deaths, the losses pale beside the number of deaths from alcohol or drug-related misfortunes that occur in most Native populations. The spirit-questing ceremony specifically tries to combat alcoholism and reduce alcohol-related deaths by strengthening a Native person's sense of identity and self-worth. I concur with Jilek, who observed:

We feel the persistence or revival of indigenous healing practices should be looked upon as an asset in the total health care for the Indian people to whom Western medical expertise is fully available in this area.⁸

A review of the iatrogenic illness and deaths that occur in the scientific or professional system quickly dispels any sense of ethical or moral superiority that we may initially feel. Kleinman and others have called for a careful look at the efficacy of traditional healers.¹⁰ At the present time, a careful review or scrutiny of the traditional healers or shaman in the Pacific Northwest is not feasible, since these practitioners are not easily identified and are understandably reluctant to publicize their activities. As recently as 1931, Alex Tye, an Indian over 80 years of age, was charged and convicted of witchcraft in a B.C. court case; he was alleged to have removed the troublesome spirit of a bear out of a patient's throat and "blown it away".¹¹

Although shamanism is no longer widely practised, at least on the Queen Charlotte Islands, there still are Native healers who are important figures in helping Native patients deal with their experience of illness. These healers are almost invariably people who belong to the community. They earn their living in an ordinary fashion, receiving only token payment for their healing services.

Among the Haida people there is often a strong sense of family ownership of songs, dances, and medicines. Certain individuals are known to possess the recipe for medicines for certain types of ailments, and the exact ingredients of such medicines are well-guarded secrets. Traditionally, medicine would be collected by a member of the opposite clan or moiety. That is, if a member of the Raven clan was ill, a member of the Eagle clan would gather and prepare the medicine, and *vice versa*.

These traditions are not always followed today. During a recent (April, 1988) visit that I made to Masset, one Haida man told me of an impressive cure of his chronic leg pains by medicine gathered by his mother. In the Haida matrilineal tradition, the mother is, by definition, a member of the same clan as this man.

During the first five years that I practised at Old Masset, my knowledge of the use of traditional Haida medicine was limited to a very sketchy awareness that some of my patients were augmenting the medicine I prescribed with traditional remedies. During a sabbatical period, I studied traditional Haida Medicine and found that a very complex system existed. Haida people are naturally resistant to full disclosure of their practices, fearing that the dominant non-Native society will either exploit and profit from their Native heritage in an unfair way (as has happened in many instances historically), or that the health-care professionals and others will ridicule their practices as primitive and unsophisticated. Out of respect for my own obligation to the Haida people, I shall not disclose any knowledge that has not been published previously by reputable researchers.

Of the several dozen Native medicines still used by the Haida and most other tribes in the Pacific Northwest, one of the most popular is the plant "devil's club" (*Oplolanax horridus*). A discussion of the rituals and uses sur-

rounding this plant will provide a glimpse of the complexity and utility of traditional medicines.

Medicines were taken for "luck" as well as for illness; traditionally a "devil's-club ritual" might be undertaken by a hunter prior to seeking important prey or by a fisherman wishing to improve his catch. A good description of the ritual has been provided by Edward Curtis, the noted photographer and ethnographer.¹² The ritual involved a complex procedure of procuring 40 sticks of devil's club; each piece measured from the elbow to the finger-tips. These sticks were pushed into the sand to form a circle in which the hunter sat. Using a gnawing technique, four girdling strips of the inner bark were taken from each of the 40 sticks, slowly chewed and swallowed. The effects of taking this much devil's club were apparently profound: with nausea, diarrhea and, finally, visual experiences in an altered state of consciousness. The outcome of the ritual was reputed to be dramatic: improved luck in hunting because of an extraordinary increase in the hunter's sense of smell and sight, and improved luck in fishing, as well. A bonus side-effect was that men who successfully underwent the ritual were said to be very attractive to women that they met.

Only a few older Haida men described their knowledge of this ritual to me but many Haida people still use devil's club as a traditional herbal treatment for many ailments. The traditional "power" numbers of "4" and "40", which are common throughout Haida mythology, are now largely ignored when instructions are given for collecting and preparing devil's club medicine.¹³

The modern indications for taking devil's club, among Native peoples in western North America, have been thoroughly described by Turner.¹⁴ The Haida people have used the inner bark of the plant for arthritis, tuberculosis, "bad colds", toothache, and pain control. The berries of the plant were used on the hair and scalp of children, against lice and dandruff.¹⁴ The plant is also used in "spiritual" medicine: a stick is hung over doorways to protect against witchcraft.¹⁴

A more recent "physical" indication for using the plant is in the treatment of diabetes. One of my Caucasian patients at Masset used an infusion of devil's club to treat his maturity-onset diabe-

tes, and his blood-sugar levels were normal while he used this treatment. Other physicians practising on the coastal areas of B.C. have noted similar experiences.¹⁵ Further work on the apparent hypoglycemic properties of this plant seems warranted, as does some concern about the potential toxicity if large quantities are consumed, as in the ritual for "luck".

This very cursory review of but a single agent in the traditional Native medicine system has illustrated several important features of that system:

- "Medicine" is used for both physical and spiritual purposes.
 - Rituals often surround collection, preparation, and administration of medicines.
 - Natural substances that have genuine pharmacologic effects are usually used. These substances produce definite changes in body functions and perceptions, and these properties are well known.
 - Although recipes may be owned, healers commonly share their medicine for only token payment. The strong sense of sharing and concern for group welfare are hallmarks of northwest coast Native cultures. These qualities are reflected in the concern shown to those who are suffering from an illness.
- The lessons that a modern family physician can learn from studying traditional systems of medicine confirm the importance of several important precepts of family medicine:
- Illness indeed affects the "whole person", and the social, psychological, and spiritual aspects of healing cannot be ignored.
 - Medicine should be practised in a way that is respectful of, and meaningful to, the patient's belief system.
 - A few well-chosen medicinal agents that have stood the test of time in clinical use are valuable adjuncts to practice and healing.
 - Above all, a sense of caring is the most important quality of successful healers. Concern for family and community are as important as concern for the individual.

There is much to learn from examining traditional Native medicine systems. Perhaps we are not so much creating a "new" paradigm in family medicine as we are merely re-discovering "old" truths. ■

Intermediate Prescribing Information

Voltaren[®] (diclofenac sodium)

VOLTAREN 25 and 50 mg Enteric Coated Tablets
VOLTAREN 100 mg slow release tablets
VOLTAREN 50 and 100 mg suppositories

Anti-inflammatory Analgesic Agent

Indications and clinical use

Symptomatic treatment of rheumatoid arthritis and severe osteoarthritis, including degenerative joint disease of the hip.

Contraindications

Patients with active, or recent history of inflammatory diseases of the gastrointestinal tract such as peptic ulcer, gastritis, regional enteritis, or ulcerative colitis, patients who have shown hypersensitivity to the drug, patients in whom acetylsalicylic acid or other non-steroidal anti-inflammatory agents have induced asthma, rhinitis, or urticaria, since cross-sensitivity has been demonstrated.

The suppositories are contraindicated in patients with any inflammatory lesions of rectum or anus and in patients with recent history of renal or anal bleeding.

Warnings

Use in Pregnancy and Lactation:

The safety of VOLTAREN in pregnancy and lactation has not been established and its use is not recommended. Reproduction studies performed in rats, rabbits and mice showed prolonged pregnancy and protracted labour when diclofenac sodium was administered before or after the delivery process had begun. Similar results have been found with other non-steroidal anti-inflammatory agents. The evidence suggests that this may be due to decreased uterine contractility resulting from the inhibition of prostaglandin synthesis.

VOLTAREN readily crosses the placental barrier. In one patient on long-term treatment with VOLTAREN 150 mg daily, a level of 100 ng/mL was measured in breast milk. By extrapolation, an infant of 4-5 kg, consuming one litre per day of breast milk, would receive less than 0.03 mg/kg/day of VOLTAREN.

Use in Children:

Not recommended in children under 16 years old because safety and dosage ranges have not been established in the pediatric age group.

Central Nervous System:

Headache, dizziness, lightheadedness, and mental confusion have been reported. Patients experiencing these symptoms should be cautioned against operating machinery or motor vehicles.

Precautions

Because of the gastrointestinal adverse effects seen with VOLTAREN, exercise caution when used in patients with a history of peptic ulcer, melena, or any gastrointestinal disease. Use of VOLTAREN in these patients requires careful evaluation of risk-to-benefit ratio. (See *Contraindications and Adverse Reactions sections.*)

If peptic ulceration or gastrointestinal bleeding occur, immediately withdraw the drug. Exercise caution in patients with a history of blood dyscrasias or disorders of coagulation. (See *Adverse Reactions.*)

Patients should have a periodic evaluation of their hemopoietic system performed because abnormalities of bone marrow function have occurred. Periodic hemoglobin estimations are advised as anemia secondary to gastrointestinal tract toxicity can occur.

Fluid retention and edema have been reported; use with caution in patients with cardiac decompensation, hypertension and renal diseases.

Clinical signs of adverse renal effects have rarely been observed with VOLTAREN, therefore renal function should be monitored. Caution is advised in patients with impaired renal function, and the dose should be reduced accordingly.

Abnormal liver function tests have been observed with VOLTAREN. Severe hepatic reactions have been reported. Although such reactions are rare, if abnormal liver function tests persist or worsen, if clinical signs consistent with liver disease develop, or if systemic manifestations occur, treatment should be discontinued. Liver function should be monitored during treatment.

When administering VOLTAREN to the elderly, special care is indicated. The dosage should be reduced to the lowest level that will provide control of symptoms.

The anti-inflammatory, antipyretic, and analgesic effects of VOLTAREN may mask the usual signs of infection and the physician should be alert to the development of infection.

Periodic ophthalmological examinations are recommended for patients on long-term therapy with non-steroidal anti-inflammatory agents.

Drug Interactions:

In man, acetylsalicylic acid reduces the serum levels of VOLTAREN when the two drugs are taken simultaneously. The bioavailability of ASA is reduced by the presence of diclofenac.

When administered concomitantly with lithium VOLTAREN will increase the lithium plasma concentration through an effect on lithium renal clearance; dosage adjustment of lithium may be required. VOLTAREN may increase the plasma concentration of digoxin; dosage adjustment of the digoxin may be required.

Pharmacodynamic studies have shown no potentiation of oral hypoglycemic or oral anticoagulant drugs due to concurrent administration with VOLTAREN. Nevertheless, when anticoagulants are given concurrently with VOLTAREN special caution is advised.

Non-steroidal anti-inflammatory agents have been reported to inhibit the activity of diuretics.

Concomitant administration of glucocorticoids, though sometimes necessary for therapeutic reasons, may aggravate gastro-intestinal

side effects. Concurrent oral treatment with two or more non-steroidal anti-rheumatic drugs may promote the occurrence of side effects.

Adverse Reactions

Gastrointestinal and central nervous system adverse reactions are the most commonly seen. The most severe adverse reactions observed were gastric ulcer and gastrointestinal bleeding.

Adverse reactions reported in clinical trials and spontaneous reports are:

Gastrointestinal System: 15.2% - Epigastric or abdominal discomfort, pressure, heaviness, or distention 6%. Epigastric, gastric, or abdominal pain 5%. Nausea 2%. Anorexia 1%. Diarrhea, vomiting, flatulence, constipation or eructation 1%. Gastric and duodenal ulcerations and bleeding 0.2%. Hyperacidity, stomatitis, coated tongue.

Central Nervous System: 9% - Dizziness 5%. Headache 3%. Malaise, insomnia, drowsiness, impaired concentration, impaired vision, tiredness 1%. Irritability, sweating.

Cardiovascular System: 4.5% - Palpitation 2.5%. Angina, arrhythmias 2.0%. Exacerbation of cardiac failure.

Dermatologic System: 4% - Rash 2%. Pruritis 1.5%. Skin eruption, eczema, urticaria, erythema less than 0.5%. Erythema multiforme and Stevens-Johnson syndrome.

Edema and Water Retention: 2.5% - Facial edema 2%. General edema 0.5%. Peripheral edema, renal failure, nephrotic syndrome.

Hematologic System: Some patients manifested anemia secondary to gastrointestinal bleeding, Leukopenia, thrombocytopenia, aplastic anemia.

Respiratory System: - asthma in patients sensitive to ASA.

Hepatic: - elevation of transaminases, jaundice, hepatitis.

Ophthalmological: - blurred vision.

Allergic: - hypersensitivity reactions.

Administration of suppositories may occasionally give rise to local irritation, and rarely local bleeding.

Dosage and Administration

Voltaren Tablets 25 mg and 50 mg (enteric coated)

In rheumatoid arthritic patients, initiate VOLTAREN treatment with 75 mg to 150 mg per day in 3 divided doses, depending on the severity of the condition. Maintenance: reduce dose to minimum amount that will provide control of symptoms, usually 75 mg to 100 mg daily in 3 divided doses.

In osteoarthritic patients, starting and maintenance dose is usually 75 mg/day in 3 divided doses. Adjust dose individually to the minimum dose that will provide control of symptoms.

Maximum recommended daily dose is 150 mg.

Take VOLTAREN with food and tablets should be swallowed whole.

Voltaren SR 100 mg (slow-release tablets)

Treatment should be initiated and individual titration carried out using VOLTAREN enteric coated tablets. Patients with rheumatoid arthritis or osteoarthritis on a maintenance dose of 100 mg per day may be changed to a once-daily dose of VOLTAREN SR 100 mg tablets, administered morning or evening.

Maximum daily dose of VOLTAREN should not exceed 150 mg.

VOLTAREN SR tablets should be swallowed whole.

Voltaren Suppositories

VOLTAREN suppositories, 50 or 100 mg, may be given as substitute for the last of the 3 oral daily doses, to a total daily dose not greater than 150 mg.

Availability

VOLTAREN (diclofenac sodium) Tablets 25 mg: yellow, round, slightly biconvex, enteric-coated, bevelled-edged tablets. Printed "25" on one side and "VOLTAREN" on the other.

VOLTAREN (diclofenac sodium) Tablets 50 mg: light brown, round, slightly biconvex, enteric-coated, bevelled-edged tablet. Printed "50" on one side and "VOLTAREN" on the other.

VOLTAREN (diclofenac sodium) Slow-Release Tablets 100 mg: pink, round, slightly biconvex, film-coated, bevelled-edged, imprinted "CGC" on one side and "GEIGY" on the other.

Store tablets at room temperature, and protect from humidity.

VOLTAREN (diclofenac sodium) Suppositories 50 mg and 100 mg: torpedo-shaped suppositories with smooth surface; yellowish-white in colour.

Protect suppositories from heat.

Product Monograph available on request.

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