MEN and BOOKS

THE INDIANS OF THE MARITIME PROVINCES, THEIR DISEASES AND NATIVE CURES*

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The Indians of the Maritime Provinces before the arrival of the white man were grouped in small tribes and had very little communication with the outside world. They had no written language and their knowledge was handed down by word of mouth. As a result the medical practices of the Maritime Indians differed in many respects from those of the Indians in other parts of Canada, as is seen in the treatment of scurvy. Jacques Cartier's men while wintering at Stadacona fell ill with scurvy and were cured by a decoction made from a tree called "annedda''. Lescarbot writes "As for the tree called annedda', mentioned by the said Cartier, the savages of these lands (Acadia) know it not". Different roots were used by different tribes to treat similar diseases, each tribe having its own remedies.

The Indians believed that every illness that could not be connected plainly with a visible influence was unnatural and due to evil influences. The disease might be due to a malevolent spirit which assumed material form and attacked the victim or it might be due to a spirit or object supernaturally injected into the person which acted at the suggestion of a human enemy who possessed supernatural powers. Diseases also might be caused by the angered spirits of the dead, or those of animals, plants and other natural objects. These beliefs determined their methods of treatment and prevention of disease. Referring to the Maritime Indians Lescarbot writes:

"For they have courage, fidelity, generosity and humanity and their hospitality is so innate and praiseworthy that they receive among them every man who is not an enemy. They are not simpletons like many people over here (Europe): they speak with much judgment and good sense."

There were two classes of physicians one the "mystery man" and the other "maker of medicines". The nearer the Atlantic coast the more prominent was the quasi-practical use of herbs without ritual. Remedies were single herbs which had a direct effect on the system. They frequently were discovered by accident. A herb which had an astringent taste was assumed to give the same effect on the stomach when taken internally. Indians used taste extensively in judging quality.

When medicines failed the mystery man was called upon to remove the spirit and apply his secret remedies. The mystery man before being accepted by a tribe had to demonstrate his power as a healer. Healing was a combination of songs, prayers, and the usage of one or more powerful fetishes. Over the most painful spot he would suck hard to extract the immediate principle of the illness and by sleight-of-hand he produced the offending cause in shape of a thorn, pebble, hair, etc., which was then thrown away. A medicine was given and a protective fetish left. Mental influence over the patient was exercised to the fullest extent. If he failed a witch or wizard was given as the cause of the disease and somebody designated as the culprit. The culprit's life then was in danger. If the mystery man lost several patients his own life was taken.

The herbalist doctors administered or taught the women of the tribe to make and to administer liquid and dry medicines. They also bled patients, operated upon ulcers, swellings, wounds, used manipulations, sweating, poulticing, scarification. Although they were aware that certain plants, roots, etc., would produce a definite effect upon the human system, they attributed any benefit to the fact that the remedies were distasteful and injurious to the demons in the system to whom the disease was attributed. The parts of plants used were roots, twigs, leaves or bark but rarely flowers or seeds. They were used commonly in the form of a decoction, a cupful in the morning. The bark was usually taken from the east side of the tree. The root or branch was used that ran towards the east, the reason being these had more medicinal potency from the rays of the sun. The use of herbs and the medicinal applications were essentially practised without conjuration or jugglery and their lore was developed by seeking resemblances between the objective and the means. The shape of an object was important, e.g., worm root, (apocynum cannabium) with wormlike stem was given as a vermifuge and snake root (aristolchia serpentaria) was used for fits on account of its contortions. Ritual and mythical associations were discarded as they found agents whose properties they had correctly learned. The knowledge of plants and trees among young and old, their ability to identify them, and acquaintance with their properties was quite remarkable. The preparations of herbs were not secrets of the shamans but were known to all the tribe. They were usually prepared and administered by women. Some old women from experience with their children and grandchildren were regarded as expert herbalists. A seventh son of a family was believed to be gifted with a knowledge of medicine and healing powers.

The Indians had many practices which they used to prevent disease. They carried amulets and charms to protect themselves from accidents

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and to keep themselves well. Dried snake's tongue was considered an excellent charm against toothache. Lescarbot states: "the savages use sweatings every month and by this means they preserve themselves, driving out by sweat all the cold and evil humours they might have gathered." Sweat baths also were used to break up a fever. The sweatings were taken in the following manner. A sweat house was built like a wigwam covered with barks or skin of beaver or moose, inside were placed hot stones to make the occupants sweat. Water was thrown on the stones and the steam fell on their backs like hot burning rain, then they rushed into the river to cool themselves. A feast followed after which they dieted. They lived almost eight days by smoking tobacco. When starving they took no exercise whatever. When hungry they returned to hunt. If they had no success hunting they starved themselves for many weeks, keeping up on the tobacco they smoked. Its biting taste gave warmth to their stomachs. Four to five good meals were needed to restore them from starvation and fatigue or from the weakness of several months' illness.

They believed that dancing was profitable for the preservation of their health. They used massage, rubbing the whole body with seal oil so as to withstand the heat and cold. The hair was kept slippery so that it would not catch in the branches of the trees. The rain and storm thus did not injure their heads but glided to their feet. The mosquito did not sting the bare skin massaged with the seal oil. The skin of the adult Indian was generally healthy and supple up to the time of senility. The men had no beards.

They partook of many decoctions to prevent disease. Twigs of ground hemlock (Taxus minor) or white spruce (Picea Canadensis) were steeped to make a kind of tea which served as a beverage. The benefits felt from these beverages were probably antiscorbutic. The leaves and stems of meadow beauty (Rhexia Virginica) vinegar wood were made into a brew for cleaning the throat and were used as a sour drink. Sweet flag (Acorus calamus) or muskrat root (Iris versicolor) was steamed in the house to keep away disease. The root was chewed for the same purpose. Bits of blood root (Sanguinaria Canadensis) dried and strung together into a necklace were worn to prevent bleeding. Bark of the elder (Sambucus Canadensis) by scraping it upward from the stem was used for an emetic and downwards was used as a physic. Acorns of white oak (Quercus alba) were eaten to induce thirst since it was thought to be beneficial to drink plenty of water.

Lescarbot writes:

the snow, in the river, and among the ice. Which also hath been their chiefest strength in the conquests they have made."

The Indians had a great feast or tobagie after an animal was killed and it continued until the whole animal had been eaten. It was a sacred duty to eat all that was provided. They did not store up food in any quantity for the long hard winter months. They ate the meats of moose, deer, caribou and bear, otter, beaver, porcupine, partridge, wildgoose, teal, ducks, wild pigeons. rabbits, snipe, cod, salmon, bass, trout, smelt and many other fish and waterfowl. They lived on shellfish such as the clam when not hunting. They were fond of mussels, scallops, clams, crabs and lobsters, the eggs of geese and ducks. They ate beaver only in the winter. The tail is the best and most delicate part. They did not feast on more than one kind of meat at a time. They were fond of the grease of the moose and drank it wholly pure. They made cakes of tallow of the grease and ate it raw. The bones of the legs and thighs of the moose after the marrow was eaten were pounded and crushed until they were reduced to a powder, the fragments were placed in a huge kettle of boiling water, so that any remaining trace of marrow or grease floated upon the surface of the boiling water. The grease was collected and preserved. The soup became as white as milk and they drank it as it was good for the chest. They valued the male in the summer and the female moose in winter. If the female was pregnant they drank the liquor amnii. The heart, kidneys, tongue, entrails and most of the fat they relished. The intestines were cleaned, made into rolls, like puddings and sausages. These were cut into slices and dried in smoke to prevent the meat from spoiling. They smoked the nose and tongue of the moose which were wonderfully good but were better when fresh. They drank pure water. They drank melted snow in winter and also the sap of the maple in spring. They ate strawberries, raspberries, blue berries, gooseberries, apples, Indian corn, beans, pumpkin and the Mic Mac potato or Chiquebi root (Apios The latter grew deep in the earth tuberosa). and the bulbs were connected by a slender They grew readily near oak trees. thread. Grape and wild vines ripened in season on Saint John River but the Indians did not eat the grapes. The hickory, beech and hazel nuts were eaten.

The Indians did not like salt. There was no diet for the sick, the food being indifferently prepared and the patient given whatever food or drink he desired. When starving in the winter they would feed on bark of trees, shellfish and on the parings of skin of their dogs or even eat their dogs. They did not eat wolf. The Indians were not cannibals but LeClerq mentions an unusual incident where a father and mother during a period of starvation killed

[&]quot;That which seemeth unto me most worthy of wondering is the nakedness of those people in a cold country, wherein they delight even to harden their children in

their two children, cut them up and ate them after stewing them in a cauldron.

The Indian women were well built, lived an outdoor life, were healthy, strong, very patient and bore children well, a very large proportion of whom were normal. She walked or stood up until the last stage of labour. Delivery took place while the woman was squatting on her knees or on her hands and knees or elbows, only ocasionally lying down. She might hold on to an attendant, usually another woman, or a sash, strap or stick which was fastened nearby for the purpose. Pressure was made on the abdomen by kneading with the hands or with a binder. After birth the perineum was washed. She rested one day and was up on the second day. No secrecy surrounded the delivery. In difficult cases the mystery man attempted external manipulation. A binder was tied about the mother's and also the baby's abdomen after childbirth to facilitate healing and to prevent excessive bleeding. After childbirth a strong bitter decoction was given to the mother to cleanse her. This was made from the leaves of yellow ash (*Fraxinus Americana*) Confine-ments usually lasted about 2 hours. The newborn baby was given fish oil or melted animal tallow after bathing, and made to swallow it before being given anything to drink or eat. The babies were breast-fed and slept most of the The mother was the only one permitted time. to nurse the baby. When food was started the mother chewed the meats, etc., into small pieces and fed them to the baby. The baby was wrapped in a beaver fur tied with a swaddling band to an even smooth board, which they carried on their backs with the feet hanging down. In the cabin it was set straight up against a stone. The upper part of the board was decorated with feathers, etc. Children had natural patience, learned by memory or imitation rather than by reason. They played in groups. The menses did not begin before 12 years.

The diseases of the Indians were due to exposure, weather, hardship, famine and injury. Eye diseases due to smoke in the houses, which had only a hole in the roof, were common. Measles, scarlet fever, diphtheria, chicken-pox, smallpox, typhus, typhoid, malaria, yellow fever, tuberculosis, venereal disease were introduced by the white man. Palsy, dropsy, gout, rheumatism, stone, gravel, gall colic, asthma were absent among Indians early travellers noted.

Scurvy was the most prevalent disease among the Indians in the winter season during the period of famine. It was due to the lack of food as well as the use of improper food. The winter supply consisted of corn, roots and herbs supplemented by hunting and fishing in some sections. It was noted that after the coming of the white man the Indian began to be more and more dependent on the white settlements during

the period of famine, and scurvy was much more severe among them. The hunting and active life seemed to make the scurvy less severe. The following quotation from Champlain is very interesting: "Of all Sieur de Mont's people who wintered first at Ste. Croix only eleven remained well. These were a jolly company of hunters who preferred rabbit hunting to the air of the fireside, skating on the ponds to the turning over lazily in bed, making snowballs to bring down game to sitting around the fire talking about Paris and its good cooks". Thirty-six of those stricken with scurvy died, and 40 recovered with spring.

The Indians of some areas used the sassafras tree as a scurvy preventive but this tree does not grow in the Maritime Provinces. An excellent description of the claims for the sassafras and sassafras boom of the early 1600's is found in Frank H. Lamb's Book of the Broadleaf Trees (pp. 330-335). In New England on the seashore is scurvy grass (Genus cruciforæ, species Cochlearia officinalis) which was used by whites to treat scurvy and the knowledge may have come from Indians. Both the spruce and hemlock trees grow in the Maritimes but the exact tree which was called the annedda is not known but was probably a spruce or a hemlock. Annedda probably means evergreen. The bark and leaves of the annedda were boiled together, the decoction was drunk every second day and the dregs were placed on the legs which were sick from scurvy. Another scurvy decoction was made from the tops of spruce, well bruised and put in a large tub and covered with boiling water for twenty-four hours and stirred frequently. Lescarbot states: "that young buds of herbs in the springtime were used before garden products were raised to restore them and to comfort their weak stomachs".

Cholera was treated with the root of sweet flag (Acorus calamus). It was their belief that the root would cause meagre excrements in man as it did in the muskrat. For diarrhœa they drank the steeped bark of chokeberry (Prunus Virginiana) "bitter berry wood". Wild chocolate (egwitkewe) would stop diarrhœa gradually though not suddenly. Pipe stem wood (alder) was a good physic when boiled and mixed with the fat from any part of the porcupine.

Slippery elm (Ulmus fulva) bark was used for bleeding lungs. Its slippery quality smoothed down the irritated throat and lungs. The colour of blood root (Sanguinaria Canadensis) suggested its use to prevent bleeding. The pitcher plant (Sarracenia purpurea) "Whippoorwill moccasins" was steeped and drunk for spitting of blood and for kidney trouble. A tea made from white pine was used in any kidney or urinary trouble. White oak (Quercus alba) bark was steeped and drunk for bleeding piles. Weak running ground plants (Lycopodia and Taxis minor) were sought as antipyretics because weakness and fever were usually associated with each other. Poplar (*Populus tremuloides*) "bitter wood" bark was steeped for colds. It produced a sweat. Tea of hemlock bark and of the bark, needles and twigs of white pine were used for colds, coughs and la grippe. Black cherry (*Prunus serotina*) bark was steeped and drunk for a cough. The berries were steeped to make a bitter tonic. Sarsaparilla (*Aralia medicaulis*) root was dried and crushed to a powder and was steeped with sweet flag (*Acorus calamus*) for cough. Staghorn sumach (*Rhus typhina* or *hirta*) was good for sore throat.

Pungent leaves of buttercup (Ranunculus acris) when inhaled produced local inflammation and sneezing which provided a vent for the pent-up feelings of a headache. They believed that the urine from a porcupine bladder dropped into the ear and kept there by a plug would improve defective hearing. An eelskin was worn next to the skin in the area of pain, e.g., about the head in a headache. It was also used to prevent cramps and rheumatism. A frog was caught and buried alive, the headache was thus buried with it. Hiccoughs were relieved by suddenly distracting the patient's mind. Warts were removed by rubbing raw meat over them and then buried with the idea of transferring them to the earth.

Tobacco smoke was blown into the ear as a cure for earache. Skunk grease or a tea made from boiled sumach was poured in the ear to relieve an earache. Moosewood (Acer pennsyl*vanicum*) from analogy was good for trouble with limbs. Fronds of brake (Pteris aquilina) from the stiffness of the leaf stalks came to be thought of for weak babies and for old people. Cedar (Arbor vitx) "brittle wood" leaves were made into poultices for swollen feet and hands. Mash made of leaves of cow lily (Nymphxa advena) "big one side" or from water lily (Castalia odorata) "little one side" was used for swelling of the limbs. High-bush cranberries (Viburnum opulus) "flat seed berries" were steeped and drunk for swollen glands. Alder (Alnus sp.) bark boiled in water stopped cramps and retching. Lady's slipper (Cypripedium acaule) "many fine roots" was steeped as a medicine for nervousness. A split open toad put over a rheumatic pain was thought to expel it. Scarification for pain was based not only on the principle of counter-irritation but also on the idea of making an exit for pain. Scarifiers were pieces of flint, goosequills, hardwood sticks and basket gauge. Blood-letting was practised by opening the veins with flint stones. A counter-irritant was made by burning a combustible vegetable fibre in contact with the skin. It was known as a moxa. Sweet fern (Myrica asplenifolia) "ant wood" leaves steeped and rubbed on the skin would cure effects of poison ivy. Jack-in-the-pulpit (Arisæma triphyllum)

"jug woman's baby" was steeped to make a liniment for external use. Its liquid is a poison.

Near Canso, Maine, was found a water to contain very powerful healing powers. This spot was visited by people from all parts of the country. The visits continued until after the white man came.

Tobacco was considered a manna from heaven, a cure. When the person was unable to smoke he would die. Drownings were quite common and the following treatment is recorded. The paunch of some beast or a large long gut was filled with tobacco smoke, one end tied, the other tied to a tobacco pipe, the free end of the pipe was inserted into the fundament of the drowned man and by pressing the gut the smoke was driven through the pipe into his body, then they hung him up by his feet to a tree and the smoke made him cast up all the water he had swallowed and brought him to life again.

Their knowledge of anatomy was gained from the animals killed in the chase and used as food. Wounds were given close attention and frequent washes made to keep them clean. The ritual of treatment was constantly present as is shown in the following incident. The French were approaching the shore to land their barques when the savages rushed out in the water to greet them. One Indian severely hurt his heel on the edge of a rock but the natives would not let the French surgeon attend him until they had completed their ritual. The French surgeon bound his heel and the Indian went away. Two hours later he returned, the most jocund in the world, his head wrapped with the dressing as it seemed more gallant.

Surgical procedures consisted of the treatment of fractures and superficial wounds and the mechanical means of curing consisted of bandaging, bonesetting, cauterizing, counterirritation, cupping by sucking with mouth or by an animal's horn with the medicine man sucking at one end, cutting, poulticing, scarifying and venesection. Contused wounds and bruises were treated by the application of cold fomentations from springs and running streams. For cuts, axe wounds, burns and sores, the balsam of fir (Abies balsamea) was chewed and the water spat upon the affected part and a poultice made of the remainder. The use of spruce gum and balsam sap on scabs, sores, etc., originated from the analogy in the belief that from the scabs and sores of a certain mythical being the gum and sap of the conifers originated.

Incised wounds were closed with sutures made of the inner bark of certain trees or the tendon of the deer. They were removed after several days. A wound after being sucked and licked sometimes had a slice of beaver's kidney placed upon it and thus was healed. Tea from the bark of the white spruce made a good salve. Beeswax was applied to severe cuts, then removed and tallow applied. Juniper gum healed cuts very quickly.

For suppurating wounds the bark of slipperv elm (Ulmus flava), basswood (Tilia) and the resinous bark of tamarack (Larix Americana) was used. To ulcers the underbark and juice of juniper berry (Genus juniperus) was applied. Festers were covered with alder leaves or bark. Splints of cedar were applied to fractures padded with leaves or grass and the limb bound by pieces of young birch (Genus betula). Splints were also made of reeds or the bark of trees and fastened to the broken bones with bandages. This prevented movement of the fragments and in a great degree the contraction of the muscles with the consequent shortening of the limb. Dislocations were reduced by main force and by a rotary method.

Amputations were performed at the joint with knives of flint, spouting vessels were seared and hæmorrhage arrested by stones heated to redness. Hæmorrhage was also treated with applications of drying powders of vegetable origin. The powder was pressed into the wound and retained with a bandage. Red willow or leaves of pigeon berries chewed up fine and placed on a fresh cut wound would stop bleeding.

The Indians were free of many of the white man's worries, they took small care of the commodities of life. They had no ambitions which filled them with cares and frettings, they had no suits in law. They were indifferent to many things which the white man considered important. After killing an animal they would simply rub their dirty hands through their hair and proceed to eat the food. Their cabins were very dirty not only from the smoke of their fires within but from the skins lying about. Nevertheless they lived to be 70 or 80 years of age, were happy and endured their trials with fortitude. When a person died the family changed their cabin.

The Indian system of medicine failed on contact with the white man. With the introduction of fire-arms the hunt became more deadly causing their food supply to be seriously diminished and made them rely more and more on European foodstuffs. European foods tended to unbalance the diet of the natives causing and facilitating the spread of disease. Biard in 1616 gives an account of the deterioration of the Maritime Indian due to contact with the white man, a tragedy in Canadian history.

NOTE .--- A more detailed biblography has been prepared by the author and may be had on request.

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MEDICO-LEGAL

Responsibility for Sponges*

In May of 1947, at the parents' request, the defendant doctor made arrangements to perform a tonsillectomy on a $5\frac{1}{2}$ year old child. The operation was performed in the hospital under the conditions usual in that hospital. In the examination on discovery it was stated by the operating room nurse, by the anæsthetist and by the defendant doctor that at the end of the operation the doctor asked the anæsthetist if he had seen all the sponges removed from the throat. The anæsthetist stated that he had been busy and did not notice, whereupon the doctor felt in the posterior naso-pharynx and explored the area with a pair of artery forceps. No sponges were found. The patient was taken from the operating room in good condition and was visited in his own room some five minutes later by the doctor. Shortly thereafter the nurse who was watching noticed some cyanosis which became more marked in the next ten minutes. Very shortly after that respiratory distress became extreme and the boy ceased to breathe almost immediately. At that time a senior nurse, called by the nurse who was in the room, removed a small gauze sponge from the throat, but in spite of artificial respiration, oxygen, and stimulants, recovery did not occur.

Very shortly after the child's death the parents instituted action against the surgeon to enforce a claim for damages. The case came to trial early in May of 1948, in the Court of King's Bench, Winnipeg, before Mr. Justice Campbell. At the end of the trial judgment was reserved and was delivered in September, 1948.

In his judgment Mr. Justice Campbell summarized the facts of the case as they had been brought out in the evidence. He found, first, that no blame could be attached either to the hospital or to its staff. With respect to the doctor, Mr. Justice Campbell said:

^{*} Anderson vs. Dr. W. E. Chasney and The Sisters of the Order of Saint Joseph of Toronto for Manitoba.