

Santal de Midy and Venereal Disease Among the  
Northwest Mounted Police of Canada

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Urban growth and development has had its effects on the number of historic sites being found in both Canada and the United States. Development and urban construction have destroyed many historical sites which would have provided the historian and the Archaeologist with information on past life ways. With the destruction of these historical sites comes the destruction of the many artifacts found in the sites--artifacts which the archaeologist could preserve and study in hopes of understanding the more recent past. Bottles are one of the more numerous finds at historic Archaeological sites. This type of artifact is important since it can tell a great deal about what historic populations were eating, the types of things they were drinking, manufacturing techniques--which indicate economic conditions, conditions of personal hygiene and, what type of medicines and drugs people were using. The later would in turn tell the archaeologist what types of diseases were predominant at that time and attitudes towards that disease and its treatment.

Venereal disease was a problem which many populations in nineteenth century Canada were desperately trying to cope with. It is known that venereal disease was present among the Northwest Mounted police of Canada. There are both historical evidence and physical evidence which help support this statement. Historical evidence comes mainly from sessional papers and personal written accounts. Such reports and written accounts tell one that many of the Northwest Mounted Police were chronic

sufferers; that many of the men 'entered the force with the disease,'<sup>1</sup> that some men died of complications due to syphilis, and that most chronic sufferers of VD were 'invalided' from the Northwest Mounted Police Force. Statistics (see Fig. 1) show that between 1875 and 1915, 341 men suffered from some sort of venereal problem--like syphilis, gonorrhoea<sup>2</sup>, gleet (a form of gonorrhoea), venereal warts, herpes, hepatitis, and venereal chancres. In Calgary alone between 1887 and 1899 30 men suffered from VD. (see Fig. 2)

The possibility is present that a considerable amount of men could have hid the fact that they were suffering from a venereal disease. Horrall writes in "(Royal) North-West Mounted Police and Prostitution on the Canadian Prairies" that:

"Commissioner Herchmer, nevertheless, was concerned about the venereal disease contracted by the men. A fervent guardian of the public purse, he felt that it was downright unreasonable that men should be off duty sick and receiving medical attention at government expense because of their own indiscretions."<sup>3</sup>

A bill was passed which forced men to pay for their hospital fees out of their own pay checks.<sup>4</sup> As a result, many men may have hid their venereal diseases and went on suffering. Those men who were chronic sufferers ailed the most. Syphilis is a disease which eventually leads to death. In the Northwest Mounted Police no one died of a venereal disease, however a

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1"Report of the Commissioner of the North-West Mounted Police, 1887." Sessional Papers. p. 104.

2 Many could not distinguish between the two diseases. So, often they were lumped together.

3S.W. Horrall, "(Royal) North-West Mounted Police and Prostitution on the Canadian Prairies" Prairie Forum: The Journal of the Canadian Plains Research Centre. p. 108.

4Horrall, p. 108.

great number of men were invalided--losing their only source of income.<sup>5</sup> Those who were not chronic sufferers recovered and returned to duty thinking they were 'cured' when in fact a reliable cure for syphilis was not discovered until 1910 by Paul Ehrlich.<sup>6</sup> The disease often emerged in cycles and the 'Daily Sick Report numbers' would sky rocket. J. Kittson writes in 1875:

While at Dufferin during the winter of 1874 and 1875 there was very little sickness in the troop and I cannot say that those who were sick suffered from any particular disease more than another except towards the spring the troop got pretty well inoculated with syphilis and several cases of gonorrhoea. Being imported from Winnipeg about that time, it was not before a good number of our men were infected with the disease. These two diseases, gonorrhoea and syphilis, increased the Daily Sick Report notably. It was impossible to take any means to prevent their spreading.<sup>7</sup>

The disease statistics for the Northwest Mounted Police drop considerably in some years. (see Fig. 1) Between 1875 and 1894, the average number of men who suffered from venereal infections per year is 27 people. Between 1896 and 1907 the average is 9 people. This is an ample drop of 18 people per year. Between 1907 and 1915 the average number of sufferers per year is 6 people. The numbers suggest that something is happening during the three time periods to alter the averages. These drops in the numerical statistics may be due to two factors. Firstly, by 1894,

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<sup>5</sup>Two in 1887, four in 1890, one in 1894, one in 1902, two in 1904, one in 1909, one in 1911, and one in 1912.

<sup>6</sup>Horrall, p. 113.

<sup>7</sup>A Chronicle of the Canadian West: North-West Mounted Police Report for 1875. Intro by S.W. Horrall, p. 25.

doctors had discovered adequate cures for venereal sores.<sup>8</sup> Also, better medicines were on the market which were able to help alleviate venereal discomfort and not produce the unpleasant side effects. Secondly, in 1907, prostitutes, which the Northwest Mounted Police officers often frequented, were forced to undergo a physical examination and produce a medical certificate stating that they were free of disease.<sup>9</sup> Deane, the superintendent of the Calgary region, stated in the 1875 Report to the Commissioner that the women in the Calgary brothels were: "...medically examined every nine days..."<sup>10</sup> Calgary was not the only NWMP outpost which required the local prostitutes to be medically examined on a regular basis. The Medicine Hat region was thought to be in the state of a venereal disease epidemic, caused by the "local sporting houses."<sup>11</sup> This theory was of course an exaggerated rumour started by those who wished to see the brothels closed down. Nonetheless, Superintendent Deane made it necessary for each working girl to produce a valid medical certificate showing a clean bill of health.<sup>12</sup>

Physical evidence can sometimes be just as informative as historical evidence as to what types of diseases were present in historical societies and the treatment of these diseases. One piece of material evidence found at the Fort Calgary Archaeological Site which indicates that venereal disease was present in the NWMP force at Calgary is the presence of two Santal de

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8 Jay Cassel. The Secret Plague, p. 50.

9 Horrall, p. 107.

10 Horrall, p. 117.

11 Horrall, p. 113.

12 Horrall, p. 113.

Midy bottles. The Santal de Midy bottle (see fig. 3) is four and a quarter inches tall by one and one sixteenth inches in diameter. The Santal bottles have ten parallel panels with Santal de Midy and Paris on alternate panels. There is no paper label present on the bottle. This is presumably because it was very common in the nineteenth century for the pharmacist to wrap medications in paper which contained advertisements for the medicine as well as a list of personal statements made by individuals stating that the medicine had miraculously worked for them.<sup>13</sup> This was, in all likelihood, the case for Santal de Midy because the outside of the bottle was embossed by letters, leaving no room for paper labels.

The name "Santal de Midy" provides a puzzle for the historian or archaeologist who is researching this particular type of bottled medicine. What exactly does it mean? There is no direct translation from French for either the word Santal or the word Midy. The word Midy has, however, been found to come from the name of the pharmacy where the drug was originally sold. This can be seen in an advertisement found in a Toulouse newspaper called La depeche de Toulouse (see Fig. 4): "Pharmacie MIDY." Santal, on the other hand, seems to be a more difficult word to define--one can only guess at its meaning. One possible answer is that perhaps the original creator of the drug is referring to a Collagenase drug called Santyl. Santyl is a proprietary name for collagenase and is presently being produced in Pentagone, Canada and Knoll, USA.<sup>14</sup> The drug Santyl is, according to the

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13A similar advertisement with personal statements is in Appendix B.

14James E.F. Reynolds, ed. Martindale: The Extra Pharmacopoeia. p. 1044.

Remington's Pharmaceutical Sciences, a drug which: "breaks down active collagen at physiological pH and temperatures."<sup>15</sup> The Martindale expands on the Santyl description by adding that it is used for: "...the debridement of dermal ulcers and burns, and possibly other necrotic lesions, to facilitate granulation and epithelialisation."<sup>16</sup> Santyl usually comes in the form of a cream but can also be found in injections.<sup>17</sup> Perhaps at one time venereal sores caused by gonorrhoea and syphilis may have been relieved by an earlier form of the drug Santyl. Or, perhaps the drug's purpose has changed over the years.

A pharmacist's label (Appendix B) for what is thought to be a later version of the Santal de Midy bottles states: "Santal Midy Capsules, For Kidney & Bladder Troubles, Venereal Disease. Imported by E. Fougera, N.Y."

<sup>18</sup> The medicine contained within the bottle is believed to have been used for venereal disease and not bladder and liver troubles--which is stated on the Fougera advertisement. There are two things which prove this assumption. Firstly, statistics (see Fig. 1 and Fig. 2) show that bladder and liver disorders were not as common as venereal disease among the NWMP. In fact, in Calgary, where the Santal de Midy bottles were found, bladder and liver disorders were almost non-existent. In a thirteen year time period only one case of bladder trouble was present and there are no cases of liver complaints. Secondly, the substances which are found in Santal de Midy are

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<sup>15</sup>Arthur Osol, ed. Remington's Pharmaceutical Sciences. p. 981.

<sup>16</sup>Reynolds, p. 1044.

<sup>17</sup>Reynolds, p. 1044.

<sup>18</sup>Richard E. Fike. The Bottle Book, p. 179.

extracts from the copaiba and cubeb plants which were widely used by doctors to treat venereal disease. The advertisement found in La depeche de Toulouse (see Fig. 4) indicates this. The advertisement reads:

Supprime copahu, cubebe, injections guerit en 48 heures les eceulements. Pharmacie MIDY, 118, Faubourg Saint-Honore, Paris.

Thus, one can say that not only was venereal disease present among the troops in Calgary, but doctors were actively trying to alleviate the discomfort with medicine.

Both pain and discomfort were commonly felt by many sufferers of gonorrhoea or syphilis. There were a variety of different techniques used by doctors and pharmacists to eliminate both pain and discomfort which almost always came during urination and from gonorrhoeal discharge.<sup>19</sup> The most popular method thought to ease the pain of chronic gonorrhoea was to inject or ingest pills containing the copaiba and cubeb plant extracts, as was previously mentioned above in the case of Santal de Midy. Copaiba and cubeb were initially taken orally. This was thought to effect the gonorrhoea when the victim urinated. The patient's urine usually had a very distinct strong smell which was how the doctor could tell if the patient was 'cured.'<sup>20</sup> The Santal advertisement found in the Toulouse paper indicates that at one time the Santal de Midy cubeb and copaiba were injected every 48 hours. The effects that the injections had on the gonorrhoeal bacteria are unknown. It is known, however, that the Santal de Midy that the NWMP received at the

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<sup>19</sup>Cassel, Pp. 46-7.

<sup>20</sup>Cassel, p. 47.

Fort were in the form of pills and not in the form of injections.<sup>21</sup>

The two extracts had potent side effects. Jay Cassel writes in The Secret Plague: Venereal Disease in Canada, 1838-1939 in reference to the two above mentioned drugs that: "They were considered powerful drugs--at any rate, their effect was powerfully evident--so only small doses were given. At the end of the eighteenth century it was found that they could be used to advantage in all cases that strong doses seemed to work better."<sup>22</sup> The side effects of cubeb and copaiba were vomiting, nausea, and diarrhoea.<sup>23</sup> Because of these unpleasant aftereffects, the copaiba and cubeb type cure was generally abandoned late in the nineteenth century<sup>24</sup> even though the medicines were probably still on the market.

The treatment of venereal disease has had a long history and a multitude of unfavourable side effects. The injection method of treatment, like that of the original form of Santal de Midy, remained common throughout the eighteenth and nineteenth century. This was because the injections had a "...genuine therapeutic effect."<sup>25</sup> The cubeb and copaiba found in Santal de Midy were not the only type of injections used. Caustic or astringent solutions were also popular. Such solutions included silver nitrate and potassium permanganate.<sup>26</sup> These solutions also had unpleasant outcomes which were, however, not as discomfoting as the patient's

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21Fike, p. 179.

22Cassel, p. 47.

23Cassel, p. 47.

24Cassel, p. 47.

25Cassel, p. 47.

26Cassel, p. 47.

reaction to Santal de Midy. Staining was common as well as irritation of the tissues which came into contact with the above mentioned solutions.<sup>27</sup> The side effects of most injected medications were often enough to deter most from the use of the drugs. Thus, many resisted treatment.

Towards the end of the nineteenth century other methods of treatment and different, less effective drugs were being employed. Some of these include boracic acid, carbonic acid, salicylic acid, zinc acetate, zinc chloride, zinc oxide, zinc sulphate, argyrol, and protargol.<sup>28</sup> These materials could be injected, rubbed on the skin, and even ingested. As well, these treatments did not have the side effects that the cubeb, copaiba, silver nitrate, or the potassium permanganate had. But, they also did not have the effectiveness of the copaiba, cubeb, silver nitrate, and potassium permanganate.

The French played an active role in the attempt to find a cure for VD. This may be because the disease was first diagnosed in 1495 among French soldiers in Naples.<sup>29</sup> Some refer to syphilis as "the French disease."<sup>30</sup> The French developed a series of methods and instruments used in the treatment of gonorrhoea and syphilis which helped further the scientist's understanding of venereal disease. Firstly, in 1892, Jules Janet realized that by washing and flushing the genitals with a succession of various chemicals the gonorrhoea or syphilis bacteria may be reached and eliminated. The only disadvantage

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27Cassel, p. 47.

28Cassel, Pp. 48-51.

29Horrall, p. 113.

30Horrall, p. 113.

of this is that more often than not, not all of the bacteria were reached.<sup>31</sup> Secondly, wax bougies were invented. These were expected to melt after being inserted and omit chemicals which would attack the venereal spirochetes.<sup>32</sup> This form of treatment was very uncomfortable and many refused to go through the discomfort and embarrassment of the treatment. Thirdly, the urethroscope.<sup>33</sup> This was a major development in venereal disease studies. After its invention doctors could examine the entire urethra and not just the outside. Fourthly, the usage of iodoform in the treatment of venereal chancres. The disadvantages of this were its high cost and its sharp distinct odour.<sup>34</sup> The most widely used method of treating VD was the usage of mercury in the form of mercurial ointments (grey oil), vaporized mercury, mercury syrup (calomel, Van Swieten's Liquor), and mercury pills (the 'blue pill') in the treatment of syphilis.<sup>35</sup> The side effects of mercury are obvious--mercury is a poison. Mercury poisoning most often leads to vomiting, stomach swelling, diarrhoea, abdominal cramps, and heavy salivation.<sup>36</sup> Thus, after all has been mentioned, it can be said that throughout the history of treatment of venereal disease that major advancements have been made but, most of the time, the treatments which were being developed were often far worse than the actual disease.

There is historical evidence which indicates that perhaps a wide variety

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31Cassel, p. 48.

32Cassel, p. 49.

33Cassel, p. 49.

34Cassel, p. 50.

35Cassel, Pp. 51-4.

36Cassel, p. 53.

of the above mentioned methods were used among the Northwest Mounted Police in the treatment of venereal disease. In the 1879 sessional papers for the NWMP a list of chemicals ordered by various different doctors is present. Some of the chemicals purchased from I.G. Baker & Co. include 14 oz. mercurial ointment<sup>37</sup>, 3 oz. mercury, 1 oz. zinc chloride<sup>38</sup>, 1 lb. potassium iodine<sup>39</sup>, and 5 bottles of pure carbonic acid<sup>40</sup>. There is no mention of the purchasing of Santal de Midy. So, perhaps one of the men may have brought the two bottles to the west when he joined the force. Not all of the mentioned chemicals were used exclusively for venereal disease. Mercurial ointments could be used to treat lice and skin diseases. Carbonic acids were obviously being used for other things since a large amount of the chemical were being bought. Therefore, one can only assume that some of these materials were possibly used for venereal disease.

Gonorrhoea, syphilis, and other venereal type diseases were running rampant throughout most of the populations of the 1700s and 1800s. Evidence to support this statement can be found at Fort Calgary in both the sessional papers and the physical evidence found at the fort. One type of physical evidence which has been found is a bottle of "Santal de Midy." This bottle had at one point contained medicine for venereal disease. The

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37Report of the Commissioner of the North-West Mounted Police, 1879. Sessional Papers, p. 60.

38Report of the Commissioner of the North-West Mounted Police, 1879. Sessional Papers, p. 22.

39This is often used in conjunction with mercury (Cassel, 53)

40Report of the Commissioner of the North-West Mounted Police, 1879. Sessional Papers, p. 151.

venereal disease problem can be paralleled to the present day AIDS situation. Like AIDS, venereal diseases had no cure and many ended up suffering for most of their life. It took at least a hundred years for physicians to fully understand the differences between the various different types of venereal diseases. And, it took at least another fifty years to find a cure which had no oppugnant side effects. Jay Cassel writes in The Secret Plague: "Doctors could seldom develop a drug whose mode of action was understood; all that they could say was that when they gave the patient the drug it had the desired effect."<sup>41</sup> The presence of venereal disease was a major vexation among the troops of the Northwest Mounted Police. Many constantly suffered and some lost their jobs to the disease. J. Kittson, M.D. the chief medical doctor for the NWMP sums up the whole situation in a report submitted to the head office in 1875: "Syphilis as a distinct disease has caused us more troubles, vexation and loss of time than any other one disease..."<sup>42</sup> Perhaps future papers could look into this aspect of venereal disease in greater detail. As well, perhaps more information could be obtained about the Santal de Midy type medication by going through early pharmaceutical and medical journals.

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<sup>41</sup>Cassel, p. 46.

<sup>42</sup>A Chronicle of the Canadian West: North-West Mounted Police Report for 1875. p. 28.

## Appendix A: Charts and Lists

**Fig 1 NWMP Disease Statistics by Year**

	<b>Venereal Problems</b>	<b>Bladder Problems</b>	<b>Liver Problems</b>
1875	23	0	0
1887	47	1	0
1888	1	0	0
1890	38	0	1
1891	16	0	0
1892	30	0	0
1893	37	0	0
1894	21	2	2
1896	7	0	0
1898	10	0	3
1899	5	0	0
1902	4	0	0
1903	13	9	1
1904	20	2	0
1905	6	0	0
1906	10	2	0
1907	4	0	0
1908	4	4	0
1909	6	5	0
1910	9	2	0
1911	10	2	0
1912	2	6	0
1913	10	2	0
1914	4	1	0
1915	8	5	0
<b>Total</b>	<b>345</b>	<b>43</b>	<b>7</b>

**Fig. 2 Calgary 1887-1899**

	Venereal					Other	
	Gleet / Gonor.	Syphilis	Warts	Herpes	Chancres	Bladder	Liver
1887	5	5	1		1	1	0
1888	0	0				0	0
1890	6	0				0	0
1891	3	0				0	0
1892	2	0				0	0
1893	2	0		2		0	0
1894	2	0	1			0	0
1896	1	0				0	0
1898	0	0				0	0
1899	0	0				0	0
Total	21	5	2	2	1	1	0

<b>Northwest Mounted Police 1887</b>					
	Gleet / Gonorr.	Syphilis	Venereal Sores	Herpes	Liver / Bladder
Regina	20	13			
Ft. MacLeod				1	
Battleford					
Maple Creek					
Lethbridge					
"Calgary"	5	5	2		1
"Prince Albert"	1				
"Ft. Sask."					
"Wood Mountain"					
"Total"	26	18	2	1	1
"Northwest Mounted Police 1888"					
	"Gleet /	"Syphilis"	"Venereal	"Herpes"	"Liver /

	Gonorr."		Sores"		Bladder"
Regina					
Ft. MacLeod					
Battleford					
Maple Creek					
Lethbridge			1		
"Calgary"					
"Prince Albert"					
"Ft. Sask."					
"Wood Mountain"					
"Total"	0	0	1	0	0
"Northwest Mounted Police 1890"					
	"Gleet / Gonorr."	"Syphilis"	"Venereal Sores"	"Hepet."	"Liver / Bladder"
Regina	9	6			
Ft. MacLeod	6	1	1		
Battleford			1		
Maple Creek		4			1
Lethbridge					
"Calgary"	6				
"Prince Albert"			1		
"Ft. Sask."	2				
"Wood Mountain"				1	
"Total"	23	11	3	1	1
"Northwest Mounted Police 1891"					
	"Gleet / Gonorr."	"Syphilis"	"Venereal Sores"	"Herpes"	"Liver / Bladder"
Regina		1			

Ft. MacLeod					
Battleford	3				
Maple Creek	1		1		
Lethbridge					
"Calgary"	3				
"Prince Albert"	4				
"Ft. Sask."	3				
"Wood Mountain"					
"Total"	14	1	1	0	0
"Northwest Mounted Police 1892"					
	"Gleet / Gonorr."	"Syphilis"	"Venereal Sores"	"Herpes"	"Liver / Bladder"
Regina	16		6		
Ft. MacLeod					
Battleford					
Maple Creek	4				
Lethbridge	2				
"Calgary"	2				
"Prince Albert"					
"Ft. Sask."					
"Wood Mountain"					
"Total"	24	0	6	0	0
"Northwest Mounted Police 1893"					
	"Gleet / Gonorr."	"Syphilis"	"Venereal Sores"	"Herpes"	"Liver / Bladder"
Regina	13				
Ft. MacLeod					
Battleford					

Maple Creek	1				
Lethbridge	1				
"Calgary"	2		2		
"Prince Albert"	2	3			
"Ft. Sask."					
"Wood Mountain"					
"Total"	19	3	2	0	0
"Northwest Mounted Police 1894"					
	"Gleet / Gonorr."	"Syphilis"	"Venereal Sores"	"Hepet."	"Liver / Bladder"
Regina		1		1	2
Ft. MacLeod	8		1		1
Battleford	4				
Maple Creek					
Lethbridge					
"Calgary"	2				
"Prince Albert"					
"Ft. Sask."					1
"Wood Mountain"	2	2			
"Total"	16	3	1	1	4
"Northwest Mounted Police 1896"					
	"Gleet / Gonorr."	"Syphilis"	"Venereal Sores"	"Hepet."	"Liver / Bladder"
Regina	1				
Ft. MacLeod	4				
Battleford					
Maple Creek					
Lethbridge					

"Calgary"	1				
"Prince Albert"	1				
"Ft. Sask."					
"Wood Mountain"					
"Total"	7	0	0	0	0
"Northwest Mounted Police 1898"					
	"Gleet / Gonorr."	"Syphilis"	"Venereal Sores"	"Herpes"	"Liver / Bladder"
Regina	1				1
Ft. MacLeod	2		1		
Battleford	1				
Maple Creek					
Lethbridge					
"Calgary"					
"Prince Albert"				1	2
"Ft. Sask."	3				
"Wood Mountain"	1				
"Total"	8	0	1	1	3
"Northwest Mounted Police 1899"					
	"Gleet / Gonorr."	"Syphilis"	"Venereal Sores"	"Herpes"	"Liver / Bladder"
Regina	1				
Ft. MacLeod	2				
Battleford	1				
Maple Creek					
Lethbridge					
"Calgary"					
"Prince Albert"					

"Ft. Sask."			1		
"Wood Mountain"					
"Total"	4	0	1	0	0

Lists of the Medicines Ordered by the NWMP  
Which Could have Possibly Been Used to Cure  
Venereal Disease and their prices 1879

1/2 lb. potassium iodide	\$5.00
1/2 lb. potassium bromide	\$2.00
1 lb. potassium nitrate	\$2.50
1/2 lb. potassium chlorate	\$1.00
3 oz. Mercury	\$1.00
1 oz. zinc chloride	\$1.00
14 oz. mercurial ointment	\$7.00
5 bott. pure carbonic acid	\$2.00
Total spent by NWMP on medicine in 1879	\$367.88

## Appendix B: Pictures and Diagrams

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