FURTHER INVESTIGATION, IT WAS LEARNED THAT THESE CHOCOLATE
FEMALE INVOLVED WAS CONTACTED REGARDING A POSSIBLE SOURCE
OF LABORATORIES. THE SALMONELLA ISOLATED WAS SEROTYPED
OF THE ORGANISM. CHOCOLATE COINS WERE MENTIONED AND 2
TESTED AS A COMPOSITE SAMPLE BECAUSE OF THEIR SMALL SIZE
BY THE FOOD

SECOND FEATURE ABOUT THE INDEX CASE IN EACH FAMILY: THIS WAS A
CHILD BETWEEN 2 AND

THE ACCUMULATED INFORMATION REVEALED ONE COMMON
INVESTIGATION WAS UNDERTAKEN TO DISCOVER ITS SOURCE.

BECAUSE THIS SEROTYPE WAS NEW TO BRITISH COLUMBIA,
AND MOST OF THE REST OF CANADA, WITH ONLY 1 ISOLATION
MADE FROM A SNAKE IN ONTARIO IN 1970, AN INTENSIVE
INVESTIGATION WAS UNDERTAKEN TO DISCOVER ITS SOURCE.
MOREOVER, THERE HAVE ONLY BEEN 2 ISOLATIONS OF THIS
SEROTYPE MADE IN THE UNITED STATES: 1 IN THE 1975-1981
PERIOD AND 1 IN 1984. THEREFORE, IT WAS FELT THAT IT SHOULD
BE POSSIBLE TO TRACE SUCH A RARE SEROTYPE TO ITS ORIGIN.
THE ACCUMULATED INFORMATION REVEALED ONE COMMON
FEATURE ABOUT THE INDEX CASE IN EACH FAMILY: THIS WAS A
CHILD BETWEEN 2 AND 4 YEARS OF AGE WHO WAS OFTEN THE ONLY
FAMILY MEMBER POSITIVE FOR THE ORGANISM.

A TELEPHONE QUESTIONNAIRE OF THE FAMILIES INVOLVED
WAS UNDERTAKEN TO TRY AND DETERMINE A COMMON SOURCE
FOR THIS SEROTYPE. INITIALLY, A PARTICULAR BRAND OF CHEDDAR
CHEESE WAS SUSPECTED ON THE BASIS OF FOOD HISTORY DATA OF
THE CHILDREN WHO WERE POSITIVE FOR S. NIMA. HOWEVER,
ONCE CASE CONTROLS WERE SURVEYED, NO DIFFERENCES WERE
OBSERVED BETWEEN THE 2 GROUPS. ATTEMPTS AT ISOLATING THIS
SEROTYPE FROM BATCHES OF CHEESE, RAW MILK STARTER
CULTURE, COLOUR AND RENNET INVOLVED IN ITS MANUFACTURE,
AND ENVIRONMENTAL SWABS OF THE CHEESE FACTORY WERE ALL
UNSUCCESSFUL.

IN THE MEANTIME, ALBERTA, SASKATCHEWAN, MANITOBA
AND ONTARIO ALSO REPORTED S. NIMA (A TOTAL OF 16
ISOLATIONS), AND 3 WERE IDENTIFIED IN THE UNITED KINGDOM.

FOLLOWING THE LATEST ISOLATION MADE IN BRITISH
COLUMBIA ON 8 SEPTEMBER, THE FAMILY OF THE 4-YEAR-OLD
FEMALE INVOLVED WAS CONTACTED REGARDING A POSSIBLE SOURCE
OF THE ORGANISM. CHOCOLATE COINS WERE MENTIONED AND 2
OF THESE WERE STILL AVAILABLE FOR TESTING. THE COINS WERE
TESTED AS A COMPOSITE SAMPLE BECAUSE OF THEIR SMALL SIZE
BY THE FOOD POISONING SECTION, BRITISH COLUMBIA DIVISION
OF LABORATORIES. THE SALMONELLA ISOLATED WAS SEROTYPED
AS S. NIMA BY THE ENTERIC BACTERIOLOGY SECTION. UPON
FURTHER INVESTIGATION, IT WAS LEARNED THAT THESE CHOCOLATE
COINS WERE A COMPOSITE SAMPLE FROM 2 DIFFERENT BRANDS
OF CHOCOLATE COINS PRODUCED IN DIFFERENT PLANTS.

THE SALMONELLA ISOLATED FROM THE CHOCOLATE COINS
WAS IDENTIFIED AS S. NIMA AND SEROTYPED AS S. NIMA BY
THE ENTERIC BACTERIOLOGY SECTION. UPON FURTHER
INVESTIGATION, IT WAS LEARNED THAT THESE CHOCOLATE
COINS WERE A COMPOSITE SAMPLE FROM 2 DIFFERENT BRANDS
OF CHOCOLATE COINS PRODUCED IN DIFFERENT PLANTS.

THE SALMONELLA ISOLATED FROM THE CHOCOLATE COINS
WAS IDENTIFIED AS S. NIMA AND SEROTYPED AS S. NIMA BY
THE ENTERIC BACTERIOLOGY SECTION. UPON FURTHER
INVESTIGATION, IT WAS LEARNED THAT THESE CHOCOLATE
COINS WERE A COMPOSITE SAMPLE FROM 2 DIFFERENT BRANDS
OF CHOCOLATE COINS PRODUCED IN DIFFERENT PLANTS.
Canada, data over 1984 and a lot of these or other chocolates. Information on new cases should be questioned about consumption of S. nima was isolated from coins from one of these bags. Further testing of the 1986 shipment of chocolate coins and medallions stored in a local warehouse is underway.

Retrospectively, imported chocolate coins as the vehicle of transmission of this rare serotype appear to fit the following observed facts: 1) the majority of the cases occurred in the 2 weeks before and after Christmas, 2) the index case in each family was often a child under 4 years of age, and 3) the cases were from widespread geographical locations with no apparent contact between them.

SOURCE: JH Jessop, Dip Bact, MSc, Supervisor, Enteric Bacteriology Section, B Khanna, BSc, BVSc, Food Poisoning Section and WA Black, MB, ChB, Director, British Columbia Provincial Laboratories, Vancouver; ME Milling, MSA, Supervisor, Health Protection Branch Laboratory, Vancouver; D Bowering, MD, Field Epidemiologist (LCDC), Victoria, British Columbia; J Hockin, MD, Bureau of Communicable Disease Epidemiology and H Liar, MSc, Chief, National Enteric Reference Centre, Ottawa, Ontario.

Editorial Comment: The above 2 chocolate products were distributed to various food and specialty stores in western Canada and as far east as Thunder Bay. On 3 October 1986, Health and Welfare Canada announced that the Vancouver distributor is voluntarily recalling these products. Any new cases of S. nima should be questioned about consumption of these or other chocolates. Information on new cases should be forwarded through the Provincial/Territorial Epidemiologists.

LABORATORY REPORTS OF HERPES VIRUS INFECTIONS IN CANADA - 1985

During 1985, the Bureau of Microbiology, Laboratory Centre for Disease Control (LCDC), Ottawa, received 14,574 reports of herpes virus infections from the 29 Canadian laboratories contributing data to the WHO virus surveillance program. This represents an increase of 19.6% over 1984 and a 10-fold increase over 1978, the first year data were available on a national basis (Figure 1).

![Figure 1. Laboratory Reports of Herpes Virus Infections, Canada, 1978-1985](image)

Note de la rédaction: Les deux produits de chocolat dont il est question dans le présent article ont été distribués dans diverses pâtisseries fines et autres magasins d'alimentation du pays dans les deux semaines suivantes; 2) dans chaque famille, le cas de référence était un enfant de moins de 4 ans, et 3) les cas étaient répartis sur une vaste étendue et n’avaient eu aucun contact entre eux.

SOURCE: JH Jessop, Dip Bact, MSc, Supervisor, Section de bactériologie entérique, B Khanna, Section des toxicinfections alimentaires et WA Black, Directeur des laboratoires provinciaux de Colombie-Britannique, Vancouver; ME Milling, MSA, Superviseur, Laboratoire de la Direction générale de la protection de la santé, Vancouver; D D Bowering, Épidémiologiste régional (LLCM), Victoria (Colombie-Britannique); J Hockin, Bureau de l’épidémiologie des maladies transmissibles et H Liar, MSc, Chef du Centre de référence national de bactériologie entérique, Ottawa (Ontario).

RAPPARTS DE LABORATOIRE SUR LES INFECTIONS À HERPÈSVIRUS AU CANADA - 1985

En 1985, les 29 laboratoires canadiens participant au programme OMS de surveillance des virus ont adressé au Bureau de microbiologie du Laboratoire de lutte contre la maladie (LLCM) 14,574 rapports sur des cas d'herpès viruse, soit une augmentation de 19,6% par rapport à 1984 et 10 fois plus qu'en 1978, première année où un relevé des données a été offert à l'échelle nationale (Figure 1).
Geographic Distribution: The largest proportion of reports (41.1%) came from Ontario, followed by British Columbia (23.2%), Alberta (13.4%), Manitoba (10.5%), Nova Scotia (3.7%), Saskatchewan (3.4%), and Quebec (3%). New Brunswick, Newfoundland, and Prince Edward Island each accounted for less than 1% of the total.

Age and Sex: Compared to 1984, the largest decline (65%) was noted for children under 6 months of age. The greatest increase involved persons 35-44 years of age. Persons 20-24 years old were identified most frequently (24.6%), followed by those 25-29 (22.8%) and 30-34 (14.4%) (Figure 2). The sex distribution was similar to that recorded in previous years, with females identified in 64% of the reports. The male:female ratio varied by age group: for persons under 14 years old it was 1:1 and for those 15-24, 1:3. The ratio then gradually declined with each successive age group until it again reached 1:1 at age 40.

Source of Isolate: The majority (55.5%) of the reports involved the genital tract, skin 19.2%, nasopharynx 7.6%, feces/rectum 0.9%, eye 0.7%, and "other or not stated" 14.0% (Table 1). The proportion associated with the genital tract increased over that reported for 1983 (46.9%) and 1984 (19.2%). The source of the specimen varied by age group.

Type of Virus: The agent was identified as belonging to the "herpes group" in 4.3% of the reports; herpes simplex (HSV) - not typed, 67.8%; HSV-1, 11.2%; and HSV-2, 16.6%. The

Répartition géographique: Le pourcentage le plus important (41,1%) des rapports provenait de l'Ontario. Le reste se répartissait comme suit: Colombie-Britannique, 23,2%; Alberta, 13,4%; Manitoba, 10,5%; Nouvelle-Écosse, 3,7%; Saskatchewan, 3,4%; et Québec, 3%. Moins d'un pour cent des rapports provenaient de Terre-Neuve, de l'Ile-du-Prince-Édouard et du Nouveau-Brunswick.

Âge et sexe: Comparativement à 1984, la plus forte diminution (65%) du nombre de rapports a été relevée chez les enfants de moins de 6 mois. L'augmentation la plus marquée a été observée chez les 35 à 44 ans. Le groupe le plus touché était celui des 20 à 29 ans (24,6%), suivi des 25 à 29 ans (22,8%) et des 30 à 34 ans (14,4%) (Figure 2). La répartition selon le sexe s'approchait de celle des années passées, 64% des cas signalés concernant des femmes. Le rapport hommes-femmes variait selon l'âge: de 1:1 chez les moins de 14 ans, il grimpait à 1:3 chez les 15 à 24 ans pour ensuite diminuer progressivement avec chaque groupe d'âge successif et se retrouver à 1:1 chez les 40 ans.

Source des isolats: Parmi les rapports, la majorité (57,6%) mentionnait le tractus génital; 19,2%, la peau; 7,6%, le rhinopharynx; 0,9%, les sels ou le rectum; 0,7%, l'oeil; et 14,0% un siège "autre/non précisé" (Tableau 1). La fréquence des infections du tractus génital était plus forte qu'en 1983 (46,9%) et qu'en 1984 (55,9%). La source du prélèvement variait selon l'âge.

<table>
<thead>
<tr>
<th>Site/ Siège</th>
<th>Type of Virus/ Type de virus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Herpes Group/ Groupe herpétique</td>
</tr>
<tr>
<td>Genital Tract/ Tractus génital</td>
<td>133</td>
</tr>
<tr>
<td>Skin/Peau</td>
<td>290</td>
</tr>
<tr>
<td>Nasopharynx/Rhinopharynx</td>
<td>14</td>
</tr>
<tr>
<td>Rectal/Feces/ Rectum/Selles</td>
<td>2</td>
</tr>
<tr>
<td>Eye/Oeil</td>
<td>3</td>
</tr>
<tr>
<td>Other/Not Stated/ Autre/non précisé</td>
<td>2/8</td>
</tr>
<tr>
<td>Total</td>
<td>640</td>
</tr>
</tbody>
</table>

Type of Virus: The agent was identified as belonging to the "herpes group" in 4.3% of the reports; herpes simplex (HSV) - not typed, 67.8%; HSV-1, 11.2%; and HSV-2, 16.6%. The

Type de virus: Parmi les rapports, 4,3% ont identifié l'agent comme faisant partie du "groupe herpétique": 67,8%, comme étant le virus de l'herpès simplex (HSV) non typé; 11,2%, comme étant HSV-1; et
proportion of HSV-1 and HSV-2 isolates increased over 1984 (8.7% and 11.8%, respectively). The "herpes group" may include cytomegalovirus, varicella zoster or Epstein-Barr virus.

Genital Tract Infections: The number of reports involving the genital tract rose from 6761 in 1984 to 8389 in 1985. The majority of reports (79%) involved persons 20-34 years of age, with the largest proportion occurring in those 20-24 years old. The male:female ratio for persons 15-19 was 1:5 but declined with increasing age. For those infections where the virus was typed, 25.1% were associated with HSV-1 and 74.9% with HSV-2. There were differences noted in the distribution of infections in males and females. Genital infections in females were more frequently associated with HSV-1 than those in males (Table 2).

AIDS Cases: The revised case definition of AIDS(1) now includes chronic HSV infection as a marker disease. During 1985, there were 36 reports of HSV infections (35 male, 1 female) involving persons with AIDS. The ages ranged from 25-52 years (median 36). Of the 33 reports in which the site was specified, the largest number 12/33 (36%) involved feces/rectum; 9, nasopharynx; 7, skin; 3, genital tract; 1, urine; and 1, post-mortem spleen. This differs from non-AIDS cases involving this age group, in which the majority of reports (67%) identified the genital tract as the site of infection. A higher proportion of the infections were associated with HSV-1 (19.4%) than with HSV-2 (13.9%).

Comments: Laboratory reports reflect only consultations for symptomatic infections, and even then a diagnosis is often made on a clinical basis without laboratory confirmation. Furthermore, laboratory reports do not indicate whether the infection is primary or recurrent. Therefore, the data presented here do not indicate the true incidence of genital HSV infections in Canada.

Acknowledgements: The assistance of the directors of the Canadian virus laboratories in collecting and reporting the data to the Bureau of Microbiology is greatly appreciated. Data compilation was conducted by PW Neumann, Bureau of Microbiology and M-J Garnett, Computer Services, LCDC, Ottawa.


SOURCE: MJ Todd, MSc, AG Jessamine MB, ChB, Bureau of Communicable Disease Epidemiology, LCDC, Ottawa.

Table 2. Distribution of Genital Herpes Isolates by Type and Sex/#

<table>
<thead>
<tr>
<th>Type of Virus/Type of virus</th>
<th>Male/Homme</th>
<th>Female/Femme</th>
<th>M:F Ratio</th>
<th>Rapport H-F</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSV-1</td>
<td>87</td>
<td>534</td>
<td>1.61</td>
<td>1:2.3</td>
</tr>
<tr>
<td>HSV-2</td>
<td>441</td>
<td>1042</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>528</td>
<td>1576</td>
<td></td>
<td>1:3.0</td>
</tr>
</tbody>
</table>

*Includes only reports for which both virus type and sex were specified./Ne comprend que les rapports oU Pon precisait a reproduction du type du virus et le sexe du sujet.

Cas de SIDA: Parmi les maladies considérées comme révélatrices du SIDA, la version révisée de la définition de cas du SIDA(1) cite maintenant l'infection chronique à HSV. En 1985, les rapports d'infection à HSV concernant des cas de SIDA se chiffraient à 36 (35 hommes, 1 femme). Les malades visés étaient âgés de 25 à 52 ans (moyenne:36). Parmi les 33 rapports précisant le siège de l'atteinte, la plus grande proportion - soit 12/33 ou 36% - mentionnait les selles ou le rectum; 9, le rhinopharynx; 7, la peau; 3, le tractus génital; 1, l'urine; et 1, la rate (prélèvement d'autopsie). Ce tableau différe de celui des cas concernant des sujets du même groupe d'âge non atteints du SIDA qui, pour la plupart (67%), présentaient une infection du tractus génital. On a enregistré un plus grand nombre de cas d'autres infections associées au HSV-1 (19.4%) qu'au HSV-2 (13.9%).

Remerciements: Nous tenons à remercier de leur aide les directeurs des laboratoires canadiens de virologie qui ont rassemblé les données et les ont transmises au Bureau de microbiologie. Les données ont été compilées par PW Neumann, Bureau de microbiologie, et M-J Garnett, Services d'informatique, LLCM, Ottawa.


SOURCE: MJ Todd, MScS, DF AG Jessamine, Bureau de l'épidémiologie des maladies transmissibles, LLCM, Ottawa.