Québec

Distribution of *Streptococcus suis* capsular types in 1998

From January to December 1998, 332 streptococcal isolates identified as *Streptococcus suis* from diseased pigs were received at our laboratory for serotyping. Of these, 321 isolates were from veterinary diagnostic laboratories in Quebec, and 11 were from other Canadian provinces and the Unites States. Serotyping was carried out by using the coagglutination test. The capsular types for the 332 isolates are given in Table 1.

In 1998, capsular type 2 had a prevalence of 22%, which was 4% higher than in 1997 (1). The other frequent serotypes were, in decreasing order, capsular types 1/2, 3, 1, 7, 8, 4, and 9. Capsular type 1 has shown a considerable increase in prevalence in 1998 (6%) when compared with 1997 (3%), while capsular types 10, 12, 13, 15, 17, 18, 20, 24, 26, and 33 were not detected.

Table 1. Numerical distribution of capsular types of *Streptococcus suis* in 332 isolates recovered from diseased pigs in 1998

Capsular type	Number of isolates	%	Capsular type	Number of isolates	%
1	20	6	18	0	0
2	74	22	19	1	< 1
1/2	44	13	20	0	0
3	41	12	21	1	< 1
4	9	3	22	3	1
5	6	2	23	4	1
6	1	< 1	24	0	0
7	20	6	25	3	< 1
8	20	6	26	0	0
9	9	3	27	4	1
10	0	0	28	1	< 1
11	1	< 1	29	1	< 1
12	0	0	30	4	1
13	0	0	31	6	2
14	1	< 1	32	2	< 1
15	0	0	33	0	0
16	1	< 1	34	7	2
17	0	0	NT	48	14

NT = Untypeable isolates

Table 2. Distribution in percentages of the 6 most prevalent *Streptococcus suis* capsular types between 1991 and 1998

Capsular type	1991	1992	1993	1994	1995	1996	1997	1998
2	21	23	19	24	18	18	18	22
1/2	12	13	8	9	14	8	11	13
3	12	13	10	10	12	14	11	12
4	4	5	3	5	8	5	5	3
7	7	7	7	6	8	10	7	6
8	6	7	8	7	7	6	7	6

Table 2 compares the distribution of the 6 most prevalent *S. suis* capsular types detected between 1990 and 1998. As reported in past years, about 60% of isolates belonged to capsular types 2, 1/2, 3, 4, 7, and 8. If untypeable isolates are not taken into consideration, the percentage exceeds 70%. These results support a proposal for diagnostic laboratories to perform serotyping by using a limited number of antisera and to refer the untypeable isolates to a reference laboratory. The number of untypeable isolates is always a concern, but some of them are either not capsulated or show autoagglutination on arrival at our laboratory.

References

1. Higgins R, Gottschalk M. Distribution of *Streptococcus suis* capsular types in 1997. Can Vet J 1998; 39: 300.

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Manitoba

Evidence for circovirus in cattle with respiratory disease and from aborted bovine fetuses

Porcine circovirus (PCV) has been associated with lesions in young pigs with postweaning multisystemic wasting syndrome (1–3). Typical clinical signs include progressive weight loss, respiratory signs and occasionally diarrhea, consistently associated with interstitial pneumonia and lymphadenopathy (2). In our laboratory, porcine circovirus infection is diagnosed by histopathology and the polymerase chain reaction (PCR) test.

The presence of antibodies reacting with porcine circovirus in cattle sera has been reported previously (4). In the present study, we tested lung tissue from cattle with pneumonia and lung and thymus tissue from aborted bovine fetuses for the presence of circovirus by using PCR. Lung tissue samples from 6 of 100 cases of bovine respiratory disease and from 4 of 30 aborted fetuses were positive for circovirus (Table 1). Of the 6 cases of respiratory disease that were circovirus PCR-positive,