

The last two cases of polio in México

Dear Editor: Epidemiological records of poliomyelitis in Mexico exist since 1937.¹ To fight against the poliovirus, Mexico manufactured its own Salk vaccine in 1956.² Since 1957 Dr. Sabin collaborated with Dr. Federico Gómez and Dr. Manuel Ramos Álvarez at Hospital Infantil de México. In 1958, a large-scale study was organized in four cities: Mexico City, Guadalajara, Monterrey and Puebla.³ In August 1959, the trivalent oral poliovirus vaccine (OPV) was tested in the city of Toluca, state of Mexico.⁴ By 1962 Mexico had manufactured its own OPV.

In the early 1960s, cases of vaccine associated paralytic polio (VAPP) were documented.⁵

In 1990, Mexico had seven cases of poliomyelitis, two are described here. On September 16th, a four month old boy from Tecomán in the state of Colima, became sick. On the 25th, a stool sample was taken and, on the 27th, he was hospitalized with acute flaccid paralysis. On October 5th, nerve conduction studies showed damage to the motor neurons of the anterior horn cells, affecting the left leg. The second patient, a 13 month old boy from Tomatlán in the state of Jalisco, on October 16th became sick. On the 23rd, stool samples were obtained; on October 24th, because of paralysis of both legs Gillian-Barré considered. On November 7th, nerve conduction studies showed damage of the motor neurons of the anterior horn cells. The families mentioned that the children were vaccinated. The question was: Were these cases due to vaccine or to wild polioviruses?

On 1990 Dr. Jesus Kumate was the head of the Health Ministry in Mexico. I was sent to the Centers for Disease Control and Prevention (CDC), Atlanta to diagnose the cause of the last two cases of flaccid paralysis. A polymerase chain reaction test (PCR) was performed with primers

for the Sabin viruses and the design of genotype-specific PCR primer pairs of the VP1 nucleotide sequences from the PV3/9288/MEX89 were constructed at the CDC.⁶ Table I shows that the viruses were wild polio Leon.

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Declaration of conflict of interests. The author declares not to have conflict of interests.

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Crisis de casos de cáncer de mama detectados en tamizaje durante el segundo año de la pandemia en el Incan

Señor editor: Con los programas "reconocimiento Incan" y la "campaña permanente de detección oportuna de cáncer de mama" fuimos testigos

Table I
WILD TYPE LEON POLIOVIRUSES FROM MÉXICO AND SABIN VIRUSES AMPLIFIED BY PCR

Strain	Provenance	PCR amplification products			
		53bp	71bp	97bp	163bp
PV3/0380/MEX90	Tomatlán, Jalisco	-	-	-	+
PV3/0377/MEX90	Tecomán, Colima	-	-	-	+
PV3/9288/MEX89	Novolato, Sinaloa	-	-	-	+
SABIN3	CDC Atlanta	+	-	-	-
SABIN2	CDC Atlanta	-	+	-	-
SABIN1	CDC Atlanta	-	-	+	-

The polymerase chain reaction (PCR) amplification products are indicated as positive or negative after being expressed by a representation of the electrophoresis on a 12% polyacrylamide gel (gel not shown). Primer pairs for the Mexican virus were as follows: 9288/PCR-1 + 0288/PCR-2. The primer pairs for the Sabin virus: Sabin3/PCR-1 + Sabin3/PCR-2; Sabin2/PCR-1 + Sabin2/PCR-2 and Sabin1/PCR-1 + Sabin1/PCR-2. This table was originated from the electrophoresis results in 1991.
CDC: Centers for Disease Control and Prevention.