



Reunión Bibliográfica.

Pediatrics

Agost-Sep-Oct 2021

Maternal Vaccination and Infant Influenza and Pertussis

Stacey L. Rowe, BSc(Hon), MPH,^{a,b} Karin Leder, MBBS, FRACP, MPH, PhD, DTMH,^a Kirsten P. Perrett, MBBS, PhD,^d Nicole Romero, BSc, MSc (Epi),^{b,e} Terry M. Nolan, MBBS, PhD,^c Nicola Stephens, BA, GradCertEd, MClInEpi, PhD,^f Benjamin C. Cowie, MBBS, FRACP, GradDipClinEpi, PhD,^g Allen C. Cheng, MBBS, FRACP, MPH, MBiostat, PhD^a



Introducción



- Importancia de la vacunación en las embarazadas de influenza y pertussi.
- No se logra el 100%.
- Evidencia sugiere que disminuyen los cuadros en lactantes al recibir sus madres las vacunas.
- Objetivo es evaluar la efectividad de las vacunas. (Victoria 6 millones de personas y 80000 partos).

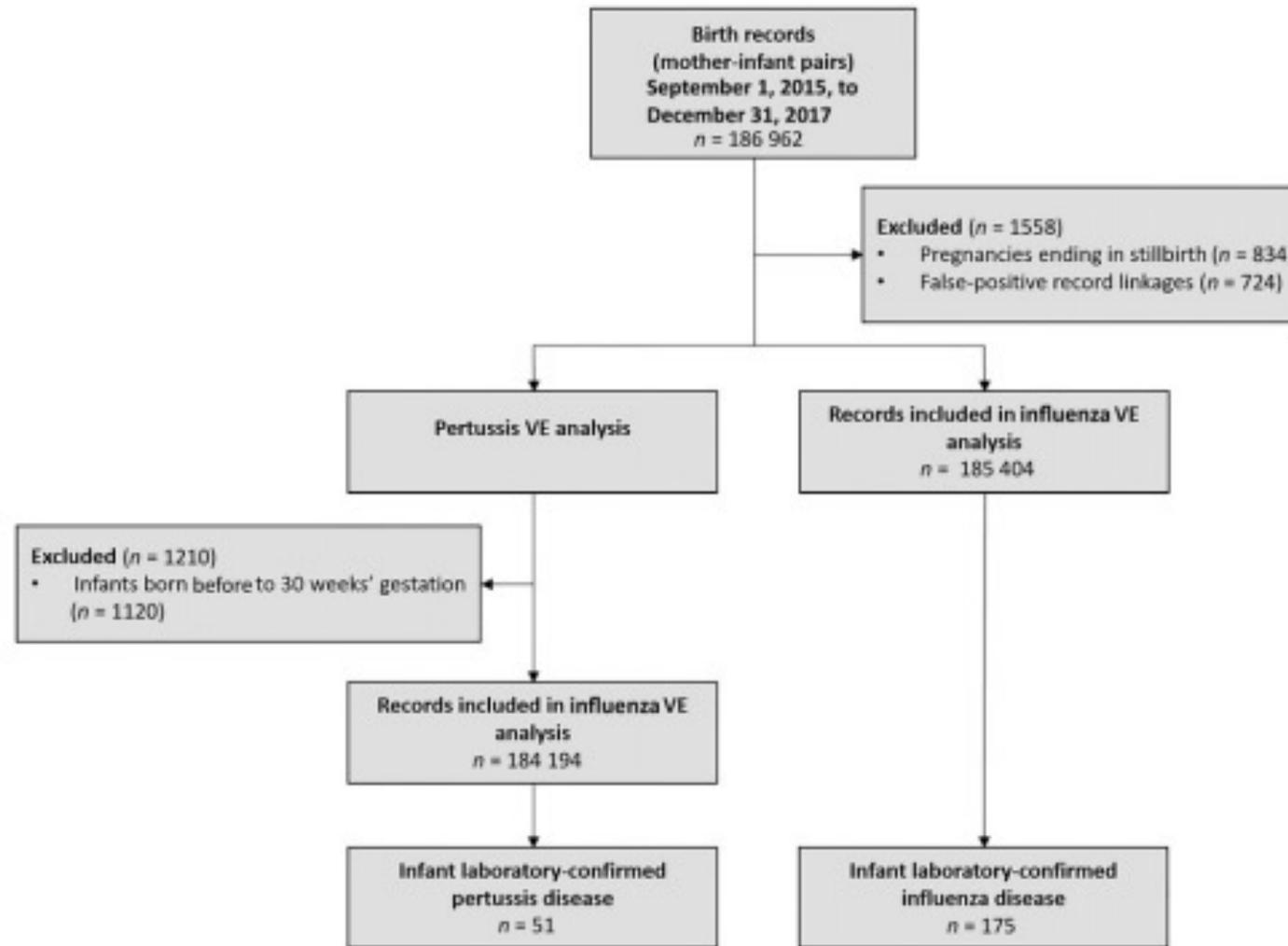
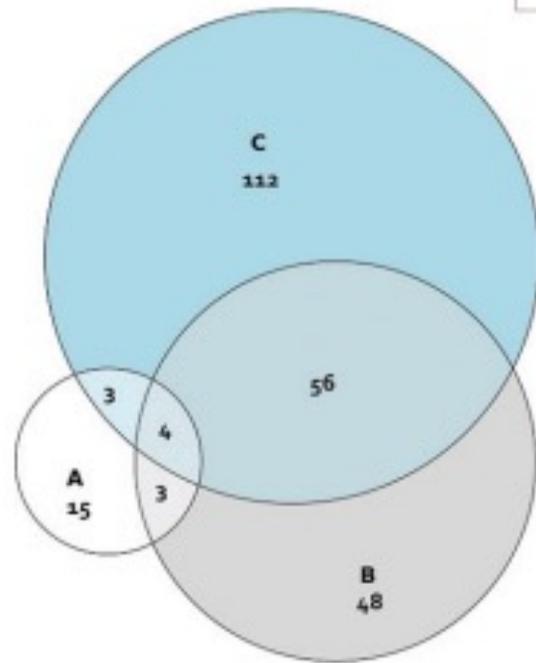


FIGURE 1

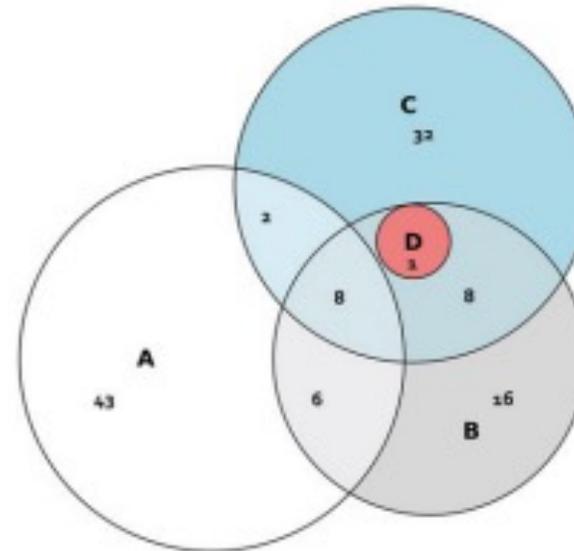
Study flow diagram showing exclusion criteria.

A



○ A ED presentation, $n = 25$
 ○ B Hospitalization, $n = 111$
 ○ C Notification, $n = 175$

B



○ A ED presentation, $n = 59$
 ○ B Hospitalization, $n = 39$
 ○ C Notification, $n = 51$
 ○ D Death, $n = 1$

FIGURE 2

A, Influenza outcomes (infants <6 months). Birth cohort = 185 404. B, Pertussis outcomes (infants <6 months; $n = 116$). Birth cohort = 184 894. Figures generated using Larsson J (2020). eulerr: Area-Proportional Euler and Venn Diagrams with Ellipses. R package version 6.1.0, <https://cran.r-project.org/package=eulerr>. Accessed May 31, 2019.

TABLE 3 Unadjusted Risk Ratios and aRRs, 95% CIs, and Influenza VE Estimates Among Infants Born to Vaccinated Mothers

	Cases, <i>n</i> (%)	RR (95% CI)	aRR (95% CI) ^a	VE (95% CI)
Influenza notification				
<2 mo				
Not vaccinated	42 (0.1)	Reference	Reference	Reference
Vaccinated	20 (0.0)	0.48 (0.28 to 0.82)	0.44 (0.25 to 0.77)	56.10 (23.31 to 74.87)
Missing	2 (0.0)	0.29 (0.07 to 1.21)	0.29 (0.07 to 1.21)	70.87 (−20.61 to 92.96)
2–<6 mo				
Not vaccinated	69 (0.1)	Reference	Reference	Reference
Vaccinated	30 (0.0)	0.46 (0.30 to 0.70)	0.64 (0.42 to 0.98)	35.70 (2.19 to 57.73)
Missing	12 (0.1)	1.08 (0.59 to 2.00)	1.16 (0.63 to 2.14)	−16.07 (−114.41 to 37.17)
<6 mo				
Not vaccinated	111 (0.1)	Reference	Reference	Reference
Vaccinated	50 (0.1)	0.47 (0.34 to 0.65)	0.55 (0.39 to 0.78)	44.79 (22.32 to 60.76)
Missing	14 (0.1)	0.78 (0.45 to 1.36)	0.81 (0.46 to 1.43)	18.59 (−42.55 to 53.51)
Any influenza outcome				
<2 mo				
Not vaccinated	53 (0.1)	Reference	Reference	Reference
Vaccinated	36 (0.0)	0.68 (0.45 to 1.05)	0.63 (0.40 to 0.98)	37.24 (2.27 to 59.70)
Missing	5 (0.0)	0.58 (0.23 to 1.45)	0.57 (0.23 to 1.43)	42.73 (−43.17 to 77.09)
2–<6 mo				
Not vaccinated	90 (0.1)	Reference	Reference	Reference
Vaccinated	44 (0.1)	0.51 (0.36 to 0.73)	0.71 (0.50 to 1.01)	28.99 (−1.48 to 50.31)
Missing	13 (0.1)	0.90 (0.50 to 1.60)	0.94 (0.52 to 1.68)	6.43 (−68.47 to 48.02)
<6 mo				
Not vaccinated	143 (0.2)	Reference	Reference	Reference
Vaccinated	80 (0.1)	0.57 (0.44 to 0.76)	0.68 (0.51 to 0.89)	32.46 (10.66 to 48.94)
Missing	18 (0.1)	0.78 (0.48 to 1.27)	0.80 (0.49 to 1.30)	20.42 (−30.41 to 51.43)
Severe influenza				
<2 mo				
Not vaccinated	31 (0.0)	Reference	Reference	Reference
Vaccinated	22 (0.0)	0.72 (0.41 to 1.23)	0.66 (0.38 to 1.15)	34.37 (−14.83 to 62.49)
Missing	3 (0.0)	0.59 (0.18 to 1.94)	0.56 (0.17 to 1.84)	43.62 (−84.39 to 82.76)
2–<6 mo				
Not vaccinated	30 (0.0)	Reference	Reference	Reference
Vaccinated	20 (0.0)	0.73 (0.42 to 1.28)	0.96 (0.55 to 1.67)	4.00 (−66.75 to 44.73)
Missing	5 (0.0)	1.06 (0.41 to 2.73)	1.03 (0.39 to 2.72)	−3.01 (−172.03 to 60.99)
<6 mo				
Not vaccinated	61 (0.1)	Reference	Reference	Reference
Vaccinated	42 (0.1)	0.72 (0.49 to 1.07)	0.79 (0.53 to 1.18)	20.85 (−17.74 to 46.79)
Missing	8 (0.1)	0.82 (0.39 to 1.71)	0.79 (0.37 to 1.66)	21.01 (−66.42 to 62.51)

TABLE 4 Unadjusted Risk Ratios and aRRs, 95% CIs, and Pertussis VE Estimates Among Infants Born to Vaccinated Mothers

	Cases, <i>n</i> (%)	RR (95% CI)	aRR (95% CI)	VE (95% CI)
Pertussis notification				
<2 mo				
Not vaccinated	10 (0.0)	Reference	Reference	Reference
Vaccinated	5 (0.0)	0.16 (0.06 to 0.48)	0.20 (0.06 to 0.63)	80.12 (37.06 to 93.72)
Missing	0 (0.0)	NC	NC	NC
2–<6 mo				
Not vaccinated	14 (0.0)	Reference	Reference	Reference
Vaccinated	22 (0.0)	0.51 (0.26 to 1.00)	0.68 (0.33 to 1.39)	31.82 (–39.13 to 66.59)
Missing	0 (0.0)	NC	NC	NC
<6 mo				
Not vaccinated	24 (0.1)	Reference	Reference	Reference
Vaccinated	27 (0.0)	0.37 (0.21 to 0.64)	0.48 (0.26 to 0.86)	52.47 (14.45 to 73.59)
Missing	0 (0.0)	NC	NC	NC
Any pertussis outcome				
<2 mo				
Not vaccinated	20 (0.1)	Reference	Reference	Reference
Vaccinated	26 (0.0)	0.42 (0.24 to 0.76)	0.53 (0.30 to 0.93)	47.42 (7.29 to 70.18)
Missing	1 (0.0)	0.13 (0.02 to 0.99)	0.13 (0.02 to 1.00)	86.75 (–0.46 to 98.25)
2–<6 mo				
Not vaccinated	20 (0.1)	Reference	Reference	Reference
Vaccinated	46 (0.0)	0.75 (0.44 to 1.27)	1.07 (0.63 to 1.83)	–7.09 (–83.31 to 37.44)
Missing	3 (0.0)	0.40 (0.12 to 1.34)	0.44 (0.13 to 1.47)	55.59 (–46.65 to 86.55)
<6 mo				
Not vaccinated	40 (0.1)	Reference	Reference	Reference
Vaccinated	72 (0.1)	0.59 (0.40 to 0.87)	0.79 (0.54 to 1.17)	20.84 (–16.89 to 46.39)
Missing	4 (0.0)	0.27 (0.09 to 0.74)	0.28 (0.10 to 0.79)	71.64 (21.05 to 89.82)
Severe pertussis				
<2 mo				
Not vaccinated	10 (0.0)	Reference	Reference	Reference
Vaccinated	8 (0.0)	0.26 (0.10 to 0.66)	0.38 (0.16 to 0.94)	61.66 (6.00 to 84.36)
Missing	0 (0.0)	NC	NC	NC
2–<6 mo				
Not vaccinated	6 (0.0)	Reference	Reference	Reference
Vaccinated	15 (0.0)	0.82 (0.32 to 2.11)	1.05 (0.43 to 2.55)	–4.63 (–155.35 to 57.13)
Missing	0 (0.0)	NC	NC	NC
<6 mo				
Not vaccinated	16 (0.0)	Reference	Reference	Reference
Vaccinated	23 (0.0)	0.47 (0.25 to 0.89)	0.64 (0.35 to 1.17)	36.48 (–16.62 to 65.40)
Missing	0 (0.0)	NC	NC	NC

Reference indicates unvaccinated mothers. NC, not calculable; RR, risk ratio.



Conclusiones.

- ▶ Este trabajo demuestra moderada efectividad en reducir los casos de influenza y tos convulsiva en menores de 2 meses.
- ▶ Niños vacunados con pertussis reducirían su efectividad si la madre está vacunada, pero la evidencia es baja.



Predictors of Invasive Herpes Simplex Virus Infection in Young Infants

Andrea T. Cruz, MD MPH,^a Lise E. Nigrovic, MD MPH,^b Jianling Xie, MD, MPH,^c Prashant Mahajan, MD MPH MBA,^{d,e} Joanna E. Thomson, MD MPH,^f Pamela J. Okada, MD,^g Neil G. Uspal, MD,^h Rakesh D. Mistry, MD MS,ⁱ Aris Garro, MD MPH,^j David Schnadower, MD MPH,^{f,k} Dina M. Kulik, MD,^l Sarah J. Curtis, MD MSc,^m Aaron S. Miller, MD MSPH,ⁿ Alesia H. Fleming, MD MPH,^o Todd W. Lyons, MD MPH,^b Fran Balamuth, MD PhD,^p Joseph L. Arms, MD,^q Jeffrey Louie, MD,^r Paul L. Aronson, MD MHS,^s Amy D. Thompson, MD,^t Paul T. Ishimine, MD,^u Suzanne M. Schmidt, MD,^v Christopher M. Pruitt, MD,^{w,x} Samir S. Shah, MD, MSCE,^f Kendra L. Grether-Jones, MD,^y Stuart A. Bradin, DO,^e Stephen B. Freedman, MDCM^z



Introducción

- Importancia del virus herpes.
- Estudio de casos y control en menores de 60 días, con LCR tomado dentro de 24 horas o que tuvieron Virus herpes detectado.
- Outcome, presencia de infección herpética diseminada o SNC vs otras infecciones herpéticas

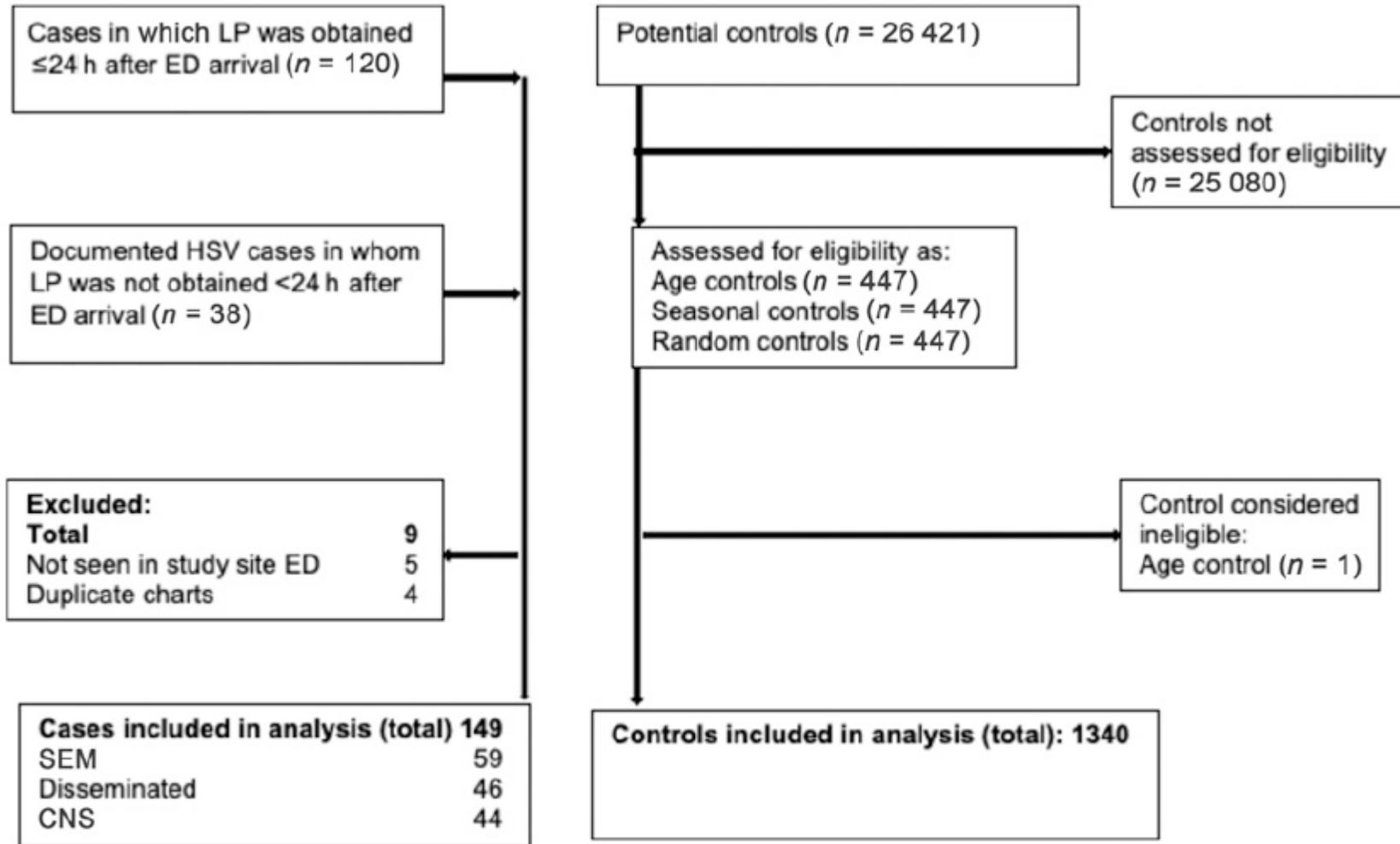


FIGURE 1

Subject identification LP, lumbar puncture.

TABLE 1 Multivariable Analyses with the Dependent Variable Being the Presence of Invasive HSV Infection

Candidate Predictor	All Controls, aOR (CI)	Seasonal Controls, aOR (CI)	Random Controls, aOR (CI)	Age-Matched Controls, aOR (CI)
Age				
<14 d	9.1 (3.4 to 24.5)	27.5 (7.1 to 106.0)	14.4 (4.8 to 43.4)	—
14–28 d	6.4 (2.3 to 17.8)	7.9 (2.3 to 27.6)	9.7 (3.0 to 31.7)	—
>28 d	Ref	Ref	Ref	—
Prematurity	2.3 (1.1 to 5.1)	—	—	—
Had seizure at home	6.1 (2.3 to 16.4)	17.6 (3.2 to 96.6)	5.8 (1.6 to 20.8)	3.4 (1.2 to 10.1)
Ill appearance	4.2 (2.0 to 8.4)	3.6 (1.5 to 8.6)	5.1 (1.8 to 14.4)	4.4 (1.8 to 10.8)
Abnormal triage temperature ^a	2.9 (1.6 to 5.3)	2.9 (1.2 to 7.0)	2.6 (1.2 to 5.9)	2.5 (1.2 to 5.0)
Vesicular rash ^b	54.8 (16.6 to 180.9)	113.5 (12.2 to 1059.2)	115.9 (8.8 to 1533.4)	29.4 (7.0 to 123.3)
Thrombocytopenia ^c	4.4 (1.6 to 12.4)	—	—	3.6 (1.1 to 11.2)
Neutropenia ^d	—	5.5 (1.5 to 20.8)	—	—
CSF pleocytosis ^e	3.5 (1.2 to 10.0)	4.7 (1.6 to 14.0)	4.3 (1.3 to 14.2)	2.9 (1.1 to 7.6)

Ref, reference group; —, the covariate was not statistically significant in the regression model.

^a Includes triage temperature $\geq 38.0^{\circ}\text{C}$ (100.4°F) or $< 36.4^{\circ}\text{C}$ (97.5°F).

^b The ORs and 95% CIs obtained from the penalized logistic regression with 95% previous limits on the OR scale (0.5 to 16) were 9.6 (95% CI: 4.4 to 21.1), 4.6 (95% CI: 2.0 to 10.7), 5.5 (95% CI: 2.5 to 12.2), and 3.8 (95% CI: 1.6 to 8.9) for the regression models including all controls, time controls only, age controls only, and random controls only, respectively.

^c Platelet count $< 150\,000$ per mm^3 .

^d ANC < 1000 cells per mm^3 .

^e CSF WBC > 15 per mm^3 (≤ 28 d) or ≥ 10 per mm^3 (> 28 d).

TABLE 2 Multivariable Analyses with the Dependent Variable Being the Presence of Any HSV Infection (ie, SEM or Disseminated)

Candidate Predictor	All Controls, aOR (CI)	Seasonal Controls, aOR (CI)	Random Controls, aOR (CI)	Age-Matched Controls, aOR (CI)
Age				
<14 d	3.3 (1.7 to 6.4)	5.5 (2.6 to 11.9)	5.3 (2.6 to 10.8)	—
14–28 d	2.9 (1.5 to 5.8)	3.7 (1.7 to 8.0)	3.6 (1.7 to 7.8)	—
>28 d	Ref	Ref	Ref	—
Duration of illness				
>1 d	2.2 (1.4 to 3.5)	2.7 (1.4 to 5.1)	—	2.0 (1.2 to 3.4)
≤1 d	Ref	Ref	—	Ref
Abnormal triage temperature ^a	—	—	—	1.8 (1.1 to 3.2)
Irritable	0.4 (0.2 to 0.7)	0.4 (0.2 to 0.9)	0.3 (0.1 to 0.7)	0.5 (0.2 to 0.97)
Had seizure at home	4.4 (2.0 to 9.3)	5.1 (1.8 to 14.2)	6.9 (2.2 to 21.3)	2.9 (1.2 to 6.9)
Ill appearance	3.2 (1.7 to 5.9)	2.4 (1.1 to 5.0)	3.3 (1.4 to 7.5)	3.8 (1.8 to 7.8)
Nonvesicular rash	2.3 (1.2 to 4.6)	3.1 (1.3 to 7.7)	2.5 (1.1 to 5.9)	2.4 (1.1 to 5.3)
Vesicular rash ^b	74.6 (31.3 to 177.6)	133.0 (24.5 to 721.5)	139.1 (26.4 to 732.3)	56.1 (18.1 to 174.0)
Thrombocytopenia ^c	2.8 (1.1 to 6.9)	—	—	2.6 (1.0 to 6.8)
Neutropenia ^d	—	3.3 (1.05 to 10.4)	—	—
CSF pleocytosis ^e	2.6 (1.2 to 5.4)	3.1 (1.4 to 7.0)	3.1 (1.2 to 8.2)	—
Hypoglycorrhachia ^f	—	—	—	2.1 (1.1 to 4.2)

Ref, reference group; —, the covariate was not statistically significant in the regression model.

^a Triage temperature $\geq 38.0^{\circ}\text{C}$ (100.4°F) or $< 36.4^{\circ}\text{C}$ (97.5°F).

^b The ORs and 95% CIs obtained from the penalized logistic regression with 95% previous limits on the OR scale (0.5 to 16) were 46.2 (95% CI: 22.6 to 94.5), 37.1 (95% CI: 15.0 to 92.2), 29.0 (95% CI: 13.1 to 64.0), and 36.9 (95% CI: 14.8 to 91.6) for the regression models including all controls, time controls only, age controls only, and random controls only, respectively.

^c Platelet count $< 150\,000$ per mm^3 .

^d ANC < 1000 cells per mm^3 .

^e CSF WBC > 15 per mm^3 (≤ 28 d) or ≥ 10 per mm^3 (> 28 d).

^f CSF glucose < 40 mg/dL.

TABLE 3 Invasive HSV Risk Score

Factor	Point(s)
Age	
<14 d	3
14–28 d	2
>28 d	0
Seizure at home	2
Ill appearance ^a	2
Abnormal triage temperature ^b	1
Vesicular rash	4
Thrombocytopenia ^c	2
CSF pleocytosis ^d	2
Prematurity ^f	1

^a “Sick, toxic, shocky,” altered or decreased mental status, fussy, inconsolable, meningismus (ie, positive Kernig or Brudzinski sign or stiff neck), petechial rash, decreased perfusion, decreased pulses.¹¹

^b Triage temperature $\geq 38.0^{\circ}\text{C}$ or $< 36.4^{\circ}\text{C}$.

^c Platelets $< 150\,000$ per mm^3 .

^d CSF WBC count > 15 cells per mm^3 if ≤ 28 d; ≥ 10 cells per mm^3 if > 28 d.

^f Birth before 37 wk gestation.

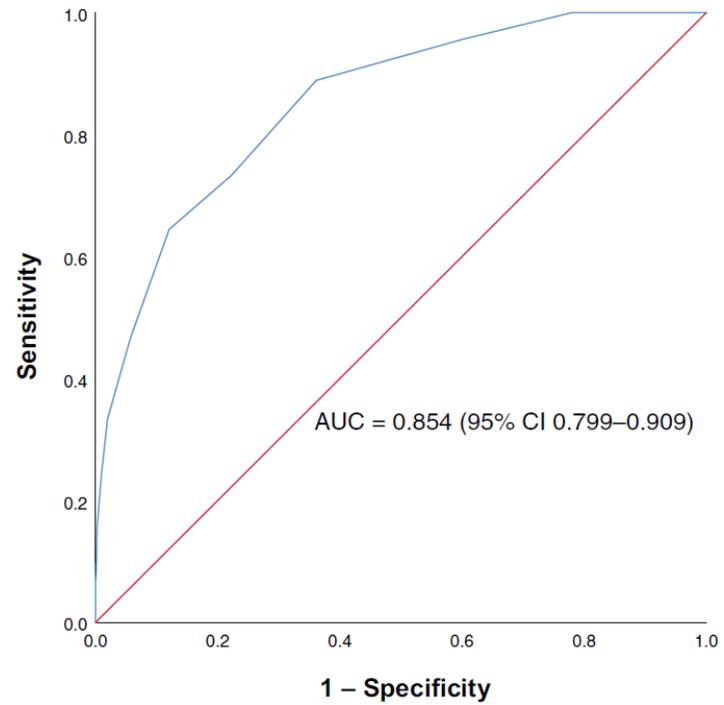


FIGURE 2

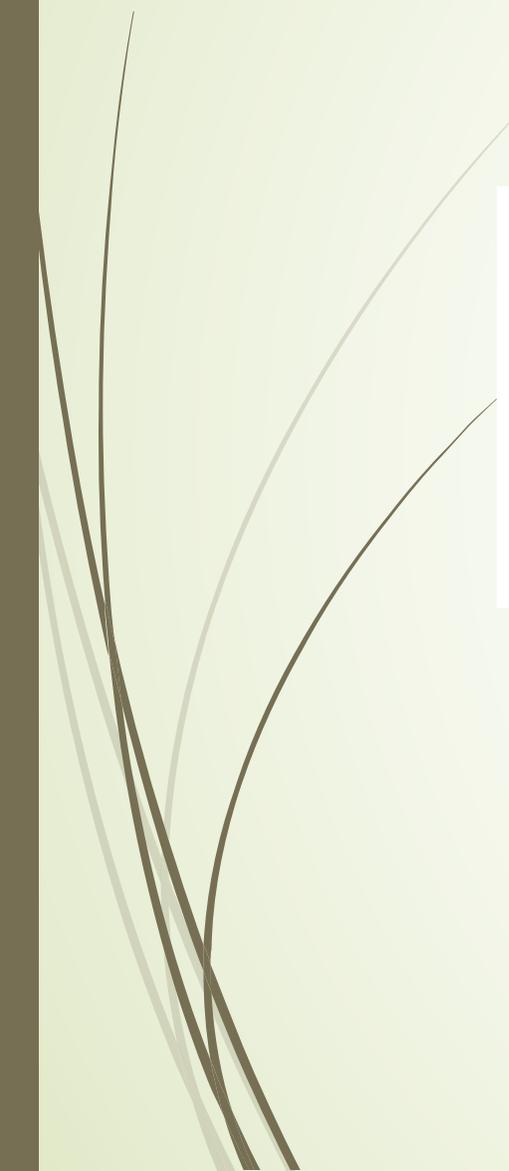
Invasive HSV risk score receiver operating characteristic curve. Analysis included 867 (58.2%) infants, including 83 of 149 (55.7%) with HSV infection. The AUC was 0.854 (95% CI: 0.799 to 0.909). When using a cut-point of ≥ 3 , the HSV risk score had a sensitivity of 95.6% (95% CI: 84.9% to 99.5%), specificity of 40.1% (95% CI: 36.8% to 43.6%), and positive likelihood ratio 1.60 (95% CI: 1.5 to 1.7), and negative likelihood ratio 0.11 (95% CI: 0.03 to 0.43).



Conclusiones



- Nuevo modelo de estratificación de pacientes, para estudio de herpes en RN menores de 60 días.
- Identificar factores de riesgo para conducta.



Early-Onset Sepsis Among Very Preterm Infants

Dustin D. Flannery, DO, MSCE,^{a,b,c} Erika M. Edwards, PhD, MPH,^{d,e,f} Karen M. Puopolo, MD, PhD,^{a,b,c}
Jeffrey D. Horbar, MD^{d,f}



Introducción

- Sepsis precoz representa un gran factor de mortalidad y morbilidad en prematuros.
 - Estudio prospectivo de la VON en menores de 1500 gr, y menores de 29 semanas.
 - Outcome principal es la sobrevida.
- 

TABLE 1 Demographics, Clinical Characteristics, and Outcomes of Infants With and Without EOS

	Overall (<i>N</i> = 84 333)	Infected (EOS) (<i>n</i> = 1139)	Not Infected (No EOS) (<i>n</i> = 83 191)
Maternal characteristics			
Race and/or ethnicity			
Black, non-Hispanic	26 109/83 539 (31.2)	375/1124 (33.4)	25 734/82 415 (31.2)
Hispanic	16 320/83 539 (19.5)	247/1124 (22.0)	16 073/82 415 (19.5)
White, non-Hispanic	34 293/83 539 (41.1)	402/1124 (35.8)	33 893/82 415 (41.2)
Asian American, non-Hispanic	4332/83 539 (5.2)	57/1124 (5.1)	4275/82 415 (5.2)
American Indian, non-Hispanic	690/83 539 (0.8)	8/1124 (0.7)	682/82 415 (0.8)
Other, non-Hispanic	1793/83 539 (2.2)	35/1124 (3.1)	1758/82 415 (2.1)
Any prenatal care	80 822/84 018 (96.2)	1067/1133 (94.2)	79 755/82 885 (96.2)
Hypertensive disorder	31 830/83 887 (37.9)	170/1126 (15.1)	31 660/82 761 (38.3)
Chorioamnionitis	10 849/83 600 (13.0)	515/1121 (45.8)	10 034/82 479 (12.5)
Diabetes	9179/83 734 (11.0)	103/1128 (9.2)	9076/82 606 (11.0)
Antenatal steroids	73 691/83 977 (87.8)	977/1134 (86.3)	72 714/82 843 (87.8)
Multiple gestation	20 555/84 329 (24.4)	177/1139 (15.6)	20 378/83 190 (24.5)
Cesarean delivery	62 594/84 322 (74.2)	659/1139 (57.9)	61 935/83 183 (74.5)
Infant characteristics			
BW, <i>n</i>	84 325	1139	83 186
Median (Q1, Q3), g	1100 (810, 1330)	870 (650, 1170)	1100 (819, 1334)
GA, <i>n</i>	84 329	1139	83 190
≤23 wk	4908/84 329 (5.8)	223/1139 (19.6)	4685/83 190 (5.6)
24–25 wk	12 482/84 329 (14.8)	324/1139 (28.5)	12 158/83 190 (14.6)
26–27 wk	16 574/84 329 (19.7)	259/1139 (22.7)	16 315/83 190 (19.6)
28–29 wk	22 762/84 329 (27.0)	229/1139 (20.1)	22 533/83 190 (27.1)
>29 wk	27 603/84 329 (32.7)	104/1139 (9.1)	27 499/83 190 (33.1)
Median (Q1, Q3), wk	28 (26, 30)	26 (24, 28)	28 (26, 30)
Apgar score at 1 min, <i>n</i>	83 416	1113	82 303
Median (Q1, Q3)	5 (3, 7)	3 (1, 5)	5 (3, 7)
SGA	16 048/84 009 (19.1)	48/1123 (4.3)	16 000/82 886 (19.3)
Female sex	41 802/84 310 (49.6)	528/1139 (46.3)	41 275/83 171 (49.6)
Outborn	11 396/84 333 (13.5)	180/1139 (15.8)	11 216/83 194 (13.5)
Congenital anomaly	4953/84 311 (5.9)	49/1139 (4.3)	4904/83 172 (5.9)
Infant individual outcomes			
NEC	3967/84 307 (4.7)	69/1139 (6.1)	3898/83 168 (4.7)
CLD	20 474/69 219 (29.6)	315/746 (42.2)	20 159/68 473 (29.4)
Late-onset sepsis	7184/81 149 (8.9)	156/946 (16.5)	7028/80 203 (8.8)
Pneumothorax	3895/84 290 (4.6)	105/1138 (9.2)	3790/83 152 (4.6)
Severe IVH	6206/76 270 (8.1)	342/990 (34.6)	5864/75 280 (7.8)
Cystic PVL	2039/76 288 (2.7)	76/990 (7.7)	1963/75 298 (2.6)
Total length of stay among survivors, <i>n</i>	75 596	763	74 833
Median (Q1, Q3), d	66 (45, 96)	92 (66, 123)	66 (45, 95)
By GA			
≤23 wk, <i>n</i>	2538	106	2422
Median (Q1, Q3), d	143 (122, 175)	148 (124, 194)	143 (122, 174)
24–25 wk, <i>n</i>	9539	191	9348
Median (Q1, Q3), d	115 (98, 142)	115 (97, 146)	115 (98, 141)
26–27 wk, <i>n</i>	14 941	191	14 750
Median (Q1, Q3), d	87 (73, 107)	90 (75, 105)	87 (73, 107)
28–29 wk, <i>n</i>	21 777	187	21 590
Median (Q1, Q3), d	63 (52, 78)	64 (53, 81)	63 (52, 78)
>29 wk, <i>n</i>	26 807	88	26 719
Median (Q1, Q3), d	40 (31, 52)	46 (37, 65)	40 (31, 52)

Data are presented as numerator/denominator (%) unless otherwise stated. Q1, quartile 1; Q3, quartile 3.

TABLE 2 Incidence of Early-Onset Neonatal Infection by Study Year, BW Category, and GA Category

Category	<i>n</i>	Infected (EOS)	Incidence Rate per 1000 Births (99% CI)
Overall	84 333	1139	13.5 (12.5–14.6)
2018	41 094	534	13.0 (11.6–14.5)
2019	43 249	605	14.0 (12.6–15.5)
BW, g			
≤500	2697	55	20.4 (14.5–28.7)
501–750	14 326	355	24.7 (21.6–28.3)
751–1000	17 736	305	17.2 (14.9–19.9)
1001–1250	20 871	210	10.0 (8.4–11.9)
1251–1500	26 415	188	7.1 (5.9–8.6)
≥1501	2280	26	11.4 (6.9–18.7)
GA, completed wk			
≤23	4908	223	45.4 (38.3–53.7)
24–25	12 482	324	26.0 (22.6–29.9)
26–27	16 574	259	15.5 (13.2–18.2)
28–29	22 762	229	10.1 (8.5–11.9)
>29	27 603	104	3.8 (2.9–4.9)

TABLE 3 Microbiology of EOS Among 1139 Infants

Pathogen	Overall, <i>n</i> (%)
Gram-positive	382 (33.2)
GBS	218 (18.8)
<i>S aureus</i>	73 (6.3)
<i>Enterococcus</i> species	32 (2.8)
<i>Streptococcus anginosus</i>	20 (1.7)
<i>Listeria monocytogenes</i>	18 (1.6)
<i>Streptococcus pneumoniae</i>	15 (1.3)
<i>Streptococcus pyogenes</i>	9 (0.8)
Gram-negative	767 (66.8)
<i>E coli</i>	538 (46.5)
<i>Haemophilus</i> species	90 (7.8)
<i>Klebsiella</i> species	46 (4.0)
<i>Enterobacter</i> species	16 (1.4)
<i>Citrobacter</i> species	15 (1.3)
<i>Morganella morganii</i>	14 (1.2)
<i>Pseudomonas</i> species	12 (1.0)
<i>Serratia</i> species	12 (1.0)
<i>Bacteroides</i> species	11 (0.9)
<i>Acinetobacter</i> species	5 (0.4)
<i>Proteus</i> species	4 (0.3)
<i>Flavobacterium</i> species	3 (0.3)
<i>Moraxella</i> species	2 (0.2)
<i>Neisseria</i> species	2 (0.2)
<i>Burkholderia</i> species	1 (0.1)
<i>Campylobacter</i> species	1 (0.1)
<i>Pantoea</i> species	1 (0.1)
Total	1158 (100)

Percentages of the total number of infections. No infections were reported for *Clostridium* species, *Achromobacter* species, *Aeromonas* species, *Alcaligenes* species, *Chryseobacterium* species, *Pasteurella* species, *Providencia* species, *Prevotella* species, *Ralstonia* species, *Salmonella* species, or *Stenotrophomonas maltophilia*.

TABLE 4 Survival and Survival Without Morbidity for Infants With and Without EOS, by GA

Outcome	Overall	Infected (EOS)	Not Infected (No EOS)	Adjusted Risk Ratio (95% CI)
Survival	75 703/84 029 (90.1)	765/1133 (67.5)	74 938/82 896 (90.4)	0.82 ^a (0.79–0.85)
By GA, ^b wk				
≤23	2358/4882 (51.6)	107/221 (48.4)	2431/4661 (52.2)	0.90 (0.77–1.05)
24–25	9569/12 387 (77.3)	191/322 (59.3)	9378/12 065 (77.7)	0.74 (0.68–0.81)
26–27	14 968/16 494 (90.8)	191/258 (74.0)	14 777/16 236 (91.0)	0.80 (0.74–0.86)
28–29	21 799/22 711 (96.0)	188/228 (82.5)	21 611/22 483 (96.1)	0.86 (0.81–0.91)
>29	26 825/27 551 (97.4)	88/104 (84.6)	26 737/27 447 (97.4)	0.86 (0.79–0.94)
Survival without morbidity ^c (VON metric)	49 390/83 941 (58.9)	294/1130 (26.1)	49 0926/82 811 (59.4)	0.66 ^a (0.60–0.72)
By GA, ^b wk				
≤23	340/4877 (7.0)	5/221 (2.3)	335/4656 (7.2)	0.25 (0.09–0.64)
24–25	2560/12 372 (20.7)	43/321 (13.4)	2517/12 051 (20.9)	0.60 (0.45–0.80)
26–27	7479/16 475 (45.4)	79/258 (30.6)	7400/16 217 (45.6)	0.63 (0.52–0.76)
28–29	15 591/22 687 (68.7)	109/226 (48.2)	15 482/22 461 (68.9)	0.69 (0.61–0.79)
>29	23 416/27 526 (85.1)	58/104 (55.8)	23 358/27 422 (85.2)	0.65 (0.55–0.78)

Data are presented as numerator/denominator (%) unless otherwise stated.

^a Adjusted for GA, inborn or outborn status, infant sex, SGA, multiple gestation, Apgar score at 1 min, mode of delivery, and presence of a congenital anomaly.

^b Adjusted for inborn or outborn status, infant sex, SGA, multiple gestation, Apgar score at 1 min, mode of delivery, and presence of a congenital anomaly.

^c The VON metric is defined as survival without any of the following: NEC, CLD, severe IVH, pneumothorax, late-onset sepsis, and cystic PVL.

TABLE 5 Survival With Major Neonatal Morbidity for Infants With and Without EOS

Survival With Major Neonatal Morbidity (CLD, sIVH or PVL, sROP)	Overall	Infected (EOS)	Not Infected (No EOS)	Adjusted Risk Ratio ^a (95% CI)
0 morbidities	37 805/59 841 (63.2)	286/682 (41.9)	37 519/59 159 (63.4)	Reference
1 morbidity	16 909/59 841 (28.3)	239/682 (35.0)	16 670/59 159 (28.2)	1.39 (1.22–1.57)
2 morbidities	4412/59 841 (7.4)	120/682 (17.6)	4292/59 159 (7.3)	1.92 (1.50–2.48)
3 morbidities	715/59 841 (1.2)	37/582 (5.4)	678/59 159 (1.1)	2.67 (1.83–3.90)

Data are presented as numerator/denominator (%) unless otherwise stated. sIVH, severe intraventricular hemorrhage; sROP, severe retinopathy of prematurity.

^a Adjusted for GA, inborn or outborn status, infant sex, SGA, multiple gestation, Apgar score at 1 min, mode of delivery, and presence of a congenital anomaly.



Congenital Syphilis Diagnosed Beyond the Neonatal Period in the United States: 2014–2018

Anne Kimball, MD, MPH,^{a,b} Virginia B. Bowen, PhD, MHS,^a Kathryn Miele, MD, MA,^{a,c} Hillard Weinstock, MD, MPH,^a
Phoebe Thorpe, MD, MPH,^a Laura Bachmann, MD, MPH,^a Robert McDonald, MD, MPH,^a Aliza Machefsky, MD,^{a,c}
Elizabeth Torrone, PhD, MSPH^a

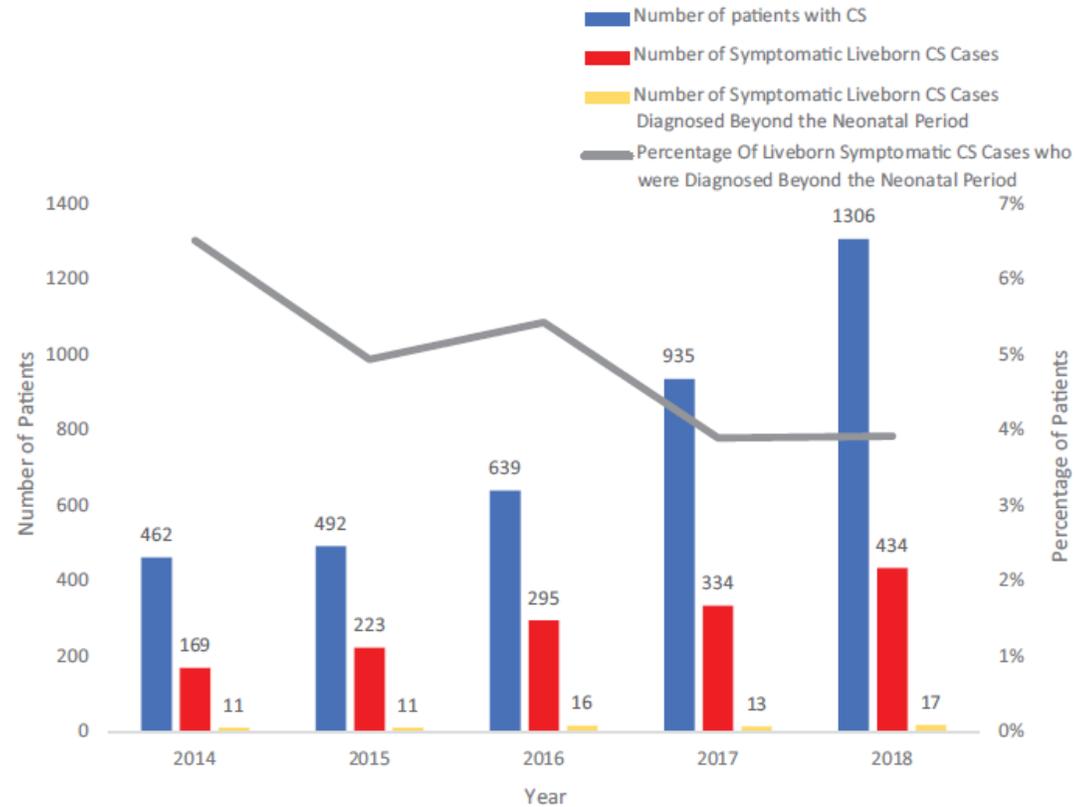


FIGURE 1

Patients with CS in the United States, 2014–2018. The bars depict case counts (left axis) by year, with the total number of patients with CS reported to the CDC shown in the first bar (blue), the number of symptomatic liveborn patients with CS in the second bar (red), and the number of symptomatic liveborn patients with CS diagnosed beyond the neonatal period in the third bar (yellow). The line depicts the percentage of liveborn symptomatic patients with CS who were diagnosed beyond the neonatal period (right axis).



Video.

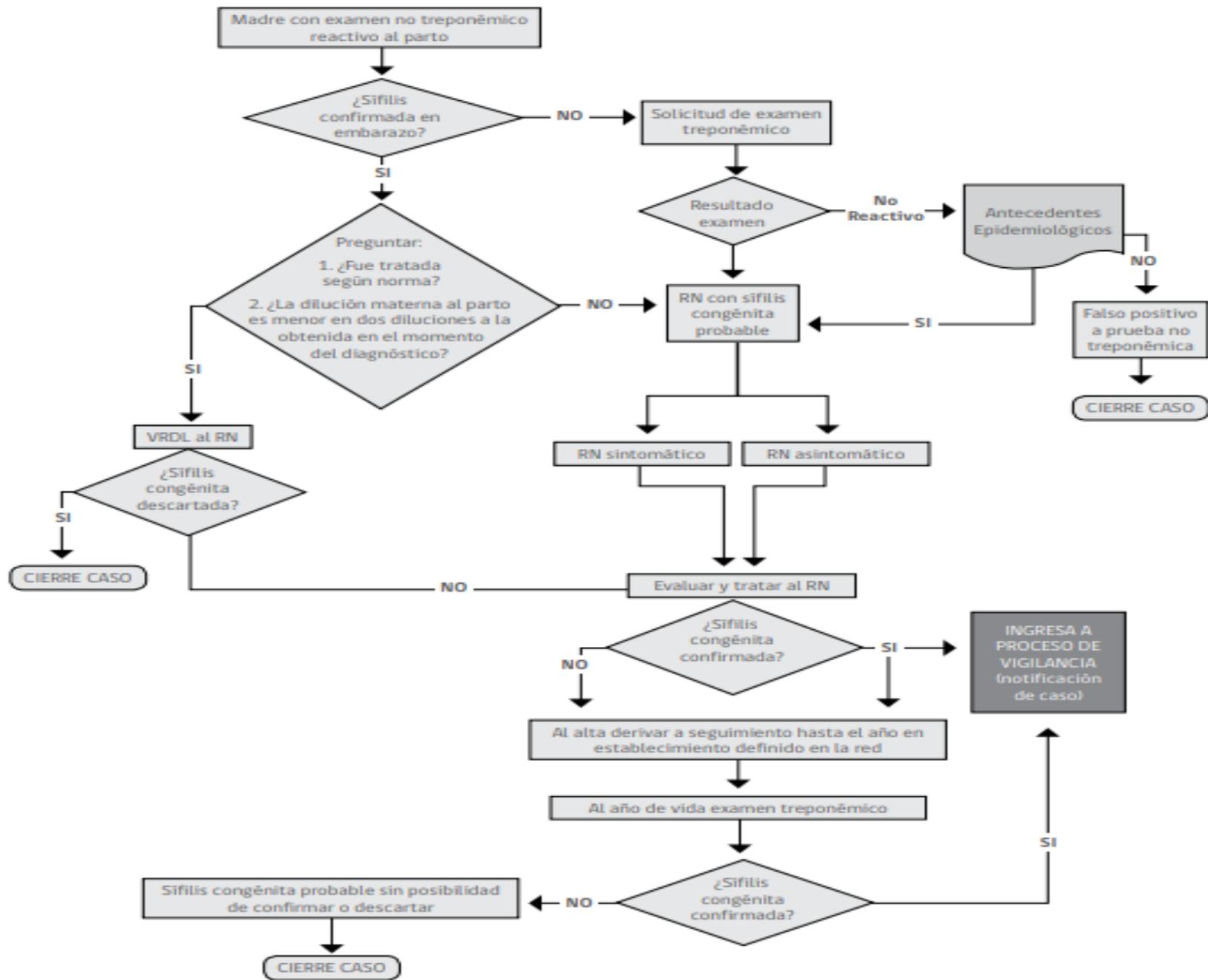




Conclusiones

- ▶ Prevenir.
- ▶ Revisar los antecedentes maternos.
- ▶ Cumplir las normas del MINSAL
- ▶ Evitar secuelas.

Flujo decisiones gestante serología no treponémica reactiva al parto





Newborn Pulse Oximetry Screening at a Community Hospital: An 8-Year Experience

Bryanna N. Schwartz, MD, MPH,^{a,b} Lisa A. Hom, RN, Esq.,^a Isabelle Von Kohorn, MD, PhD,^{b,c,d} Jeffrey Becker, MD,^{a,b,d}
Sandra S. Cuzzi, MD,^{b,e,f} Sue Ellen Grier Clarke, MSN, RNC-MNN, TNP,^g Sharon C. Kiernan, MD,^{c,d} Gerard R. Martin, MD^{a,b}

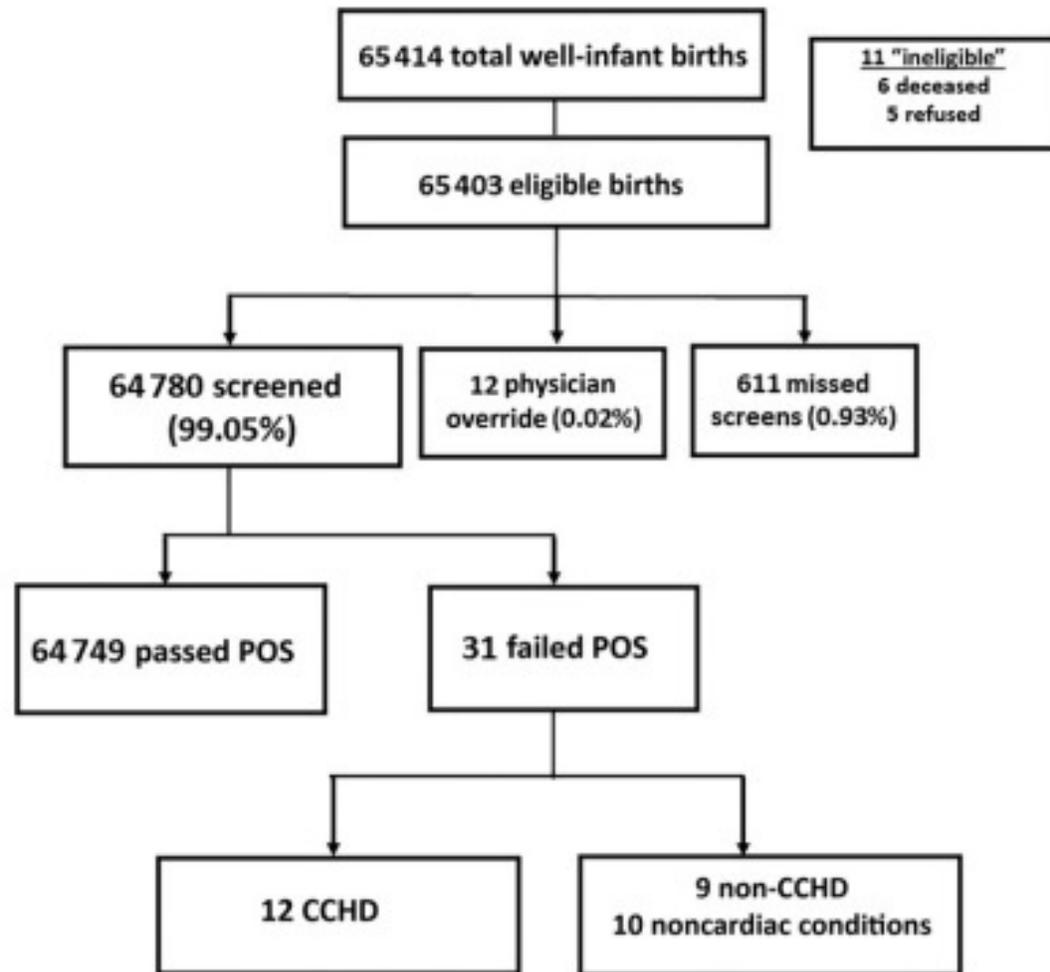


FIGURE 1
Outcomes of POS.

TABLE 1 Congenital Heart Disease Diagnoses after Failed POS

	<i>n</i>
CCHD (<i>n</i> = 12)	
Total anomalous pulmonary venous return	4
Aortic coarctation	3
Pulmonary atresia with ventricular septal defect	1
D-transposition of the great arteries	1
Double-outlet right ventricle	1
Interrupted aortic arch	1
Critical pulmonary stenosis	1
Other echocardiographic findings	
Atrioventricular canal defect	1
Ventricular septal defect	1
Ventricular septal defect and persistent pulmonary hypertension of newborn	1
Persistent pulmonary hypertension of newborn	4
Pulmonary valve stenosis	2
Dilated right atrium and ventricle	1
Large atrial Chiari network with prolapsing tricuspid valve	1
Large atrial septal defect	1
Dilated, hypertrophied right ventricle, small aortic isthmus, decreased biventricular systolic function	1

TABLE 3 Secondary Conditions Identified by POS

	<i>n</i>
Congenital pneumonia	1
Congenital pneumonia and sepsis	1
Meconium aspiration	1
Transient tachypnea of newborn (requiring oxygen)	2
Persistent pulmonary hypertension of newborn	5