

**Table 1:** Studies included in the meta-analysis and their reported outcomes

Study	Study details	Study period	Group		Outcomes
			Shirodkar (n)	McDonald (n)	
Peters et al. (1979) <sup>1</sup>	University of Virginia, USA	1957-1977	27	13	Neonatal mortality, chorioamnionitis
Harger (1980) <sup>2</sup>	Magee Womens Hospital, USA	1971-1978	82	169	Preterm birth <37, cervical laceration
Schwartz et al. (1984) <sup>3</sup>	Edgware General Hospital, England Temple Hospital, USA	1970-1975 1976-1981	67	7	Chorioamnionitis
Cardwell (1988) <sup>4</sup>	Baptist Hospital, USA	1976-1986	80	49	Preterm birth <37, cervical laceration, chorioamnionitis, caesarean section
Bassaw et al. (1990) <sup>5</sup>	Mount Hope Women's Hospital, Trinidad	Not reported	49	138	Preterm birth (<37 & <28)
Marks et al. (1992) <sup>6</sup>	New York University Medical Center and Columbia Presbyterian Medical Center, USA	1973-1986	23	86	Preterm birth <37
Ayhan et al. (1993) <sup>7</sup>	Hacettepe University School of Medicine, Turkey	1980-1990	51	323	Preterm birth (<37 & <28), neonatal mortality*
Perrotin et al. (2002) <sup>8</sup>	Hospital Bretonneau, France	1996-2001	9	16	Cervical length, neonatal mortality, preterm birth <32, PPROM, chorioamnionitis
Rozenberg et al. (2003) <sup>9</sup>	Poissy-Saint Germain Hospital Center, France	1998-2001	14	19	Cervical length, preterm birth (<37 & <34)
Odibo et al. (2007) <sup>10</sup>	Multicentre; USA, UK and The Netherlands	Not reported	127	150	Birthweight, days between cerclage and birth, preterm birth (<28 & <35), neonatal mortality
Hume et al. (2012) <sup>11</sup>	Mount Sinai Hospital, USA	2005-2010	47	28	Preterm birth (<32 & <35), PPROM
Heath et al. (2013) <sup>12</sup>	Croydon University Hospital, UK	2008-2012	23	99	Preterm birth <37, caesarean section
Otsuki et al. (2016) <sup>13</sup>	60 tertiary centres of the Japanese Society of Preterm birth prevention, Japan	2004-2011	34	34	Birthweight, preterm birth (<37, <34, <32 & <28), neonatal mortality
Bartolo et al. (2017) <sup>14</sup>	Llile University Hospital, France	2006-2013	14	24	Birthweight, preterm birth (<37, <28, <35 & <32), neonatal mortality, PPROM, chorioamnionitis
Wong et al. (2017) <sup>15</sup>	Mackay Memorial Center, Taiwan	2002-2014	36	24	Birthweight, preterm birth (<37, <34, <32 & <28), neonatal mortality, PPROM
Cleary et al. (2018) <sup>16</sup>	Trihealth Hospitals, USA	2012-2014	86	20	Preterm birth <35
Figuerola et al. (2019) <sup>17</sup>	Saint Francis Hospital and Medical Center, USA	2008-2013	47	48	Days between cerclage and birth, birthweight, preterm birth (<37, <35 & <32), neonatal mortality, PPROM, chorioamnionitis

\*reported neonatal mortality to within 1 month postpartum

## References

1. Peters 3rd W, Thiagarajah S, Harbert Jr G. Cervical cerclage: twenty years' experience. Southern medical journal. 1979;72(8):933.
2. Harger J. Comparison of success and morbidity in cervical cerclage procedures. Obstetrics and gynecology. 1980;56(5):543-8.
3. Schwartz R, Chatwani A, Sullivan P. Cervical cerclage. A review of 74 cases. The Journal of reproductive medicine. 1984;29(2):103-6.
4. Cardwell M. Cervical cerclage: a ten-year review in a large hospital. Southern medical journal. 1988;81(1):15-9.
5. Bassaw B, Roopnarinesingh S. The efficacy of cervical cerclage. The West Indian medical journal. 1990;39(1):39-42.
6. Marks F, Hoskins IA, Rosenberg C, Young BK. Surgical treatment of incompetent cervix. American journal of perinatology. 1992;9(05/06):481-3.
7. Ayhan A, Mercan R, Tuncer Z, Tuncer R, Kişnişi H. Postconceptional cervical cerclage. International Journal of Gynecology & Obstetrics. 1993;42(3):243-6.
8. Perrotin F, Marret H, Ayeva-Derman M, Alonso A, Lansac J, Body G. Second trimester cerclage of short cervixes: which technique to use? A retrospective study of 25 cases. Journal de gynécologie, obstétrique et biologie de la reproduction. 2002;31(7):640-8.
9. Rozenberg P, Sénat M-V, Gillet A, Ville Y. Comparison of two methods of cervical cerclage by ultrasound cervical measurement. The Journal of Maternal-Fetal & Neonatal Medicine. 2003;13(5):314-7.

10. Odibo AO, Berghella V, To MS, Rust OA, Althuisius SM, Nicolaides KH. Shirodkar versus McDonald cerclage for the prevention of preterm birth in women with short cervical length. *American journal of perinatology*. 2007;24(01):055-60.
11. Hume H, Rebarber A, Saltzman DH, Roman AS, Fox NS. Ultrasound-indicated cerclage: Shirodkar vs. McDonald. *The Journal of Maternal-Fetal & Neonatal Medicine*. 2012;25(12):2690-2.
12. Heath O, Abraham J, Ward G. Cervical cerclage procedures at Croydon University Hospital 2008-2012 the indications and outcomes: EP1. 193. *Bjog: An International Journal of Obstetrics and Gynaecology*. 2013;120:92-3.
13. Otsuki K, Nakai A, Matsuda Y, Shinozuka N, Kawabata I, Makino Y, et al. Randomized trial of ultrasound–indicated cerclage in singleton women without lower genital tract inflammation. *Journal of Obstetrics and Gynaecology Research*. 2016;42(2):148-57.
14. Bartolo S, Garabedian C, Deruelle P, Debarge V, Ducloy-Bouthors A-S, Subtil D. Evaluation of a new technique of prophylactic cervical cerclage simplified from the Shirodkar cerclage: A pilot study. *Journal of Gynecology Obstetrics and Human Reproduction*. 2017;46(4):343-7.
15. Wong C-H, Chen C-P, Wang K-G, Sun F-J, Chen C-Y. Comparison of two cervical cerclages for the prevention of preterm birth and neonatal complications. *The Journal of Maternal-Fetal & Neonatal Medicine*. 2017;30(5):551-5.
16. Cleary E, Smith K, Schnettler W. Does Height Matter? The Association Between Cerclage Height and Pregnancy Outcome. *Journal of Gynecologic Surgery*. 2018;34(4):177-82.

17. Figueroa R, Crowell R, Martinez A, Morgan M, Wakefield D. McDonald versus Shirodkar cervical cerclage for the prevention of preterm birth: impact of body mass index. *The Journal of Maternal-Fetal & Neonatal Medicine*. 2019;32(20):3408-14.