

1.Introduction

2. Aims:

- To determine the prevalence of wound infection and dehiscence of perineal tears among women giving vaginal delivery.
- To determine its associated factors among women giving vaginal delivery without prophylactic antibiotic.

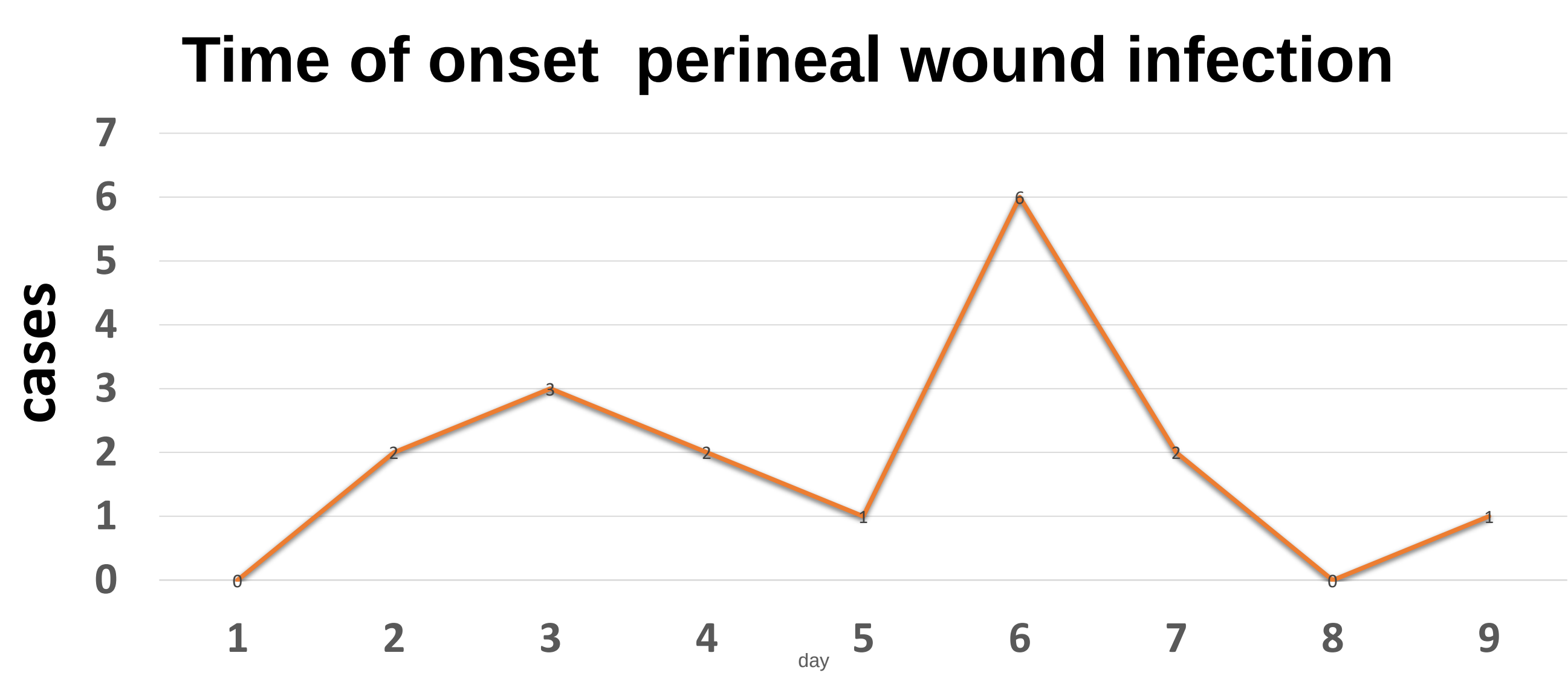
3. Methods:

A prospective cohort study was conducted at Hung Vuong hospital, Vietnam in 2022. A sample of 1,051 women giving vaginal delivery with 1- or 2-degree of perineal tears were followed up to 9 days postpartum. Those who had been used antibiotics during labor or postpartum were excluded from the study. Data were collected two times at 3 days and 9 days of postpartum. STATA 13.0 was used to analyze data, multiple logistic regression was applied to identify any factors associated with wound infection.



4. Results:

About 80% of women aged from 18-35, 31.21% were housewife, 66.41% had junior to high school education. About 71.65% women had normal BMI (18.5-24.9), 99.05% had gestational age ≥ 37 weeks, 63.18% were multiparous, 19% had diabetes, 16.74% had anemia, 2.29% had fever and 68.89% had 1-10 vaginal toucher exams during delivery. Approximately 50% women had episiotomy, in which second-degree of perineal tears accounted for 51.67%. Spontaneous vaginal delivery was about 96%, 82.68%, were admitted to delivery less than 24 hours, rupture membrane to delivery ≤ 6 hours, mean of hospital stay was $3 \pm 0,36$ days. Wound infection of perineal tears on 3rd day and 9th day: 0.29% and 1.62%



Other complications of perineal tears	The 3 rd day		The 9 th day	
	n	%	n	%
Discharge	1	0.1	20	1.9
Dehiscence	1	0.1	30	2.9
Swelling, redness, pain	22	2.1	37	3.5

Antenatal and natal data	OR ^r (CI:95%)	p	OR ⁱ (CI:95%)	p
Nulliparous	3.21(1.17-8.74)	0.02	1.1(0.36-3.33)	0.86
Multiparous	1		1	
Not diabetes	1		1	
Diabetes	3.87 (1.47-10.16)	0.006	3.81 (1.66-8.73)	0.002
No obstetric pain relief	1		1	
obstetric pain relief	2.93 (0.96-9.14)	0,059	1.88(0.58-6.11)	0.29
Manual perineal protection	1		1	
Episiotomy	16.56(2.19-125.38)	0.007	14.36(1.73-118.63.41)	0.013
Rupture membrane to delivery				
≤ 6 hours	1		1	
6-18 hours	1.90 (0.61-5.91)	0.27	2.79(0.97-8.05)	0.056

5. Conclussions:

- Perineal wound infection 9 days postpartum: 1.62%.
- Episiotomy increase the risk of perineal wound infection 14.36 times compare to manual perineal protection OR_j = 14.36 (1.73-118.63)CI 95%. Diabetes in pregnancy the risk of perineal wound infection 3.81 times compare to not diabetes, OR_j 3.81 (1.66-8.73) CI 95%.