

Protocol for Management of Patients at Risk of Preterm Birth

SOON : Past, Present and Future

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I have no conflicts of interest to declare

Except...

- *I work in a Prevention of Preterm Birth Clinic*

The Problem of Preterm Birth

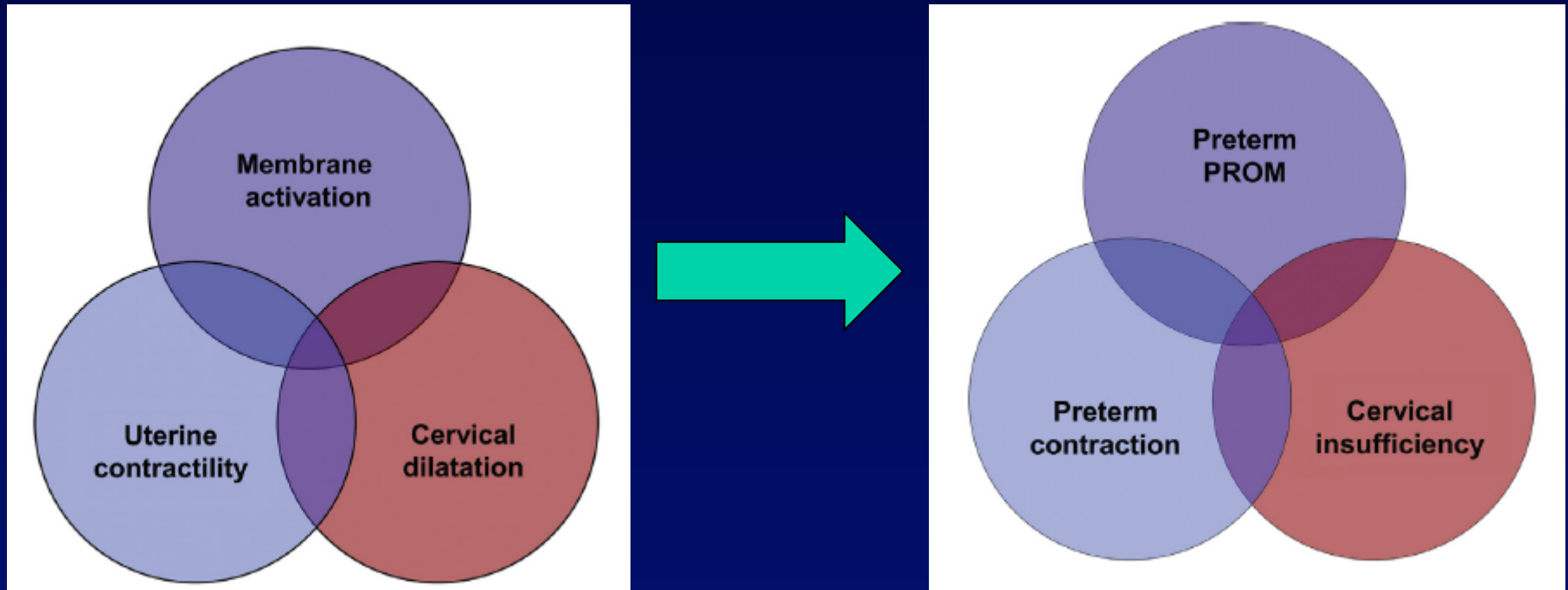
2010: 15 million babies were born preterm
1 million babies died due to direct causes

Canada: 8% of all births: ~ 24 000 babies
increased ~25% over past decade

Morbidities: Childhood CP, vision problems, CLD, MR
High rates of PPD
Significant cost to society

<u>Recurrence Risk</u>	1 PTB	16-20%
	2 PTB	20-30%
	>2 PTB	40+%

Pathway to Preterm Birth

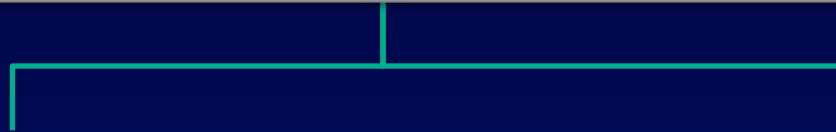


Romero et al. 2014 *Seminars in Fetal and Neonatal Medicine*

How did we get here??

- CREMS Summer Project 2015
- GTA-OBS Consensus Meeting Spring 2016
- Protocol for PTB Management

History of a singleton delivery between 14-34 weeks



History of a singleton delivery between
14-34 weeks

2 or more previous
PTB

Consider MFM non-
pregnant consult or
early referral in
pregnancy

History of a singleton delivery between 14-34 weeks

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graph TD; A[History of a singleton delivery between 14-34 weeks] --> B[One previous PTB]; A --> C[ ]; B --> D[ ]; B --> E[ ]; B --> F[ ]; B --> G[ ]; C --> H[ ]; C --> I[ ]; C --> J[ ]; C --> K[ ]; C --> L[ ];
```

One previous PTB

History of a singleton delivery between 14-34 weeks

One previous PTB

Infection Screening

- BV
- Urine C+S
- GC/CT
- Ureaplasma

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Progesterone from 16 weeks
gestation until 34-36 weeks

change

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One previous PTB

Infection Screening

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- Urine C+S
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Progesterone from 16 weeks
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Cervical length monitoring

- q2 weeks initially
- Increase to q1 week 2 weeks prior to
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```
graph TD; A[Cervical length monitoring<br/>- q2 weeks initially<br/>- Increase to q1 week 2 weeks prior to previous event or with acute cervical change] --> B[If CL >25mm continue<br/>biweekly surveillance<br/>with TVUS until 28 weeks];
```

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If CL >25mm continue
biweekly surveillance
with TVUS until 28 weeks

If <25mm consider referral
to MFM Specialist

Cervical length monitoring

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- Increase to q1 week 2 weeks prior to previous event or with acute cervical change

If CL >25mm continue
biweekly surveillance
with TVUS until 28 weeks

If <25mm consider referral
to MFM Specialist

What about elective cerclage in pts with previous PTB??

Consider if CL <25(<15mm), history strongly
suggestive of mechanical insufficiency, history of
cervical trauma

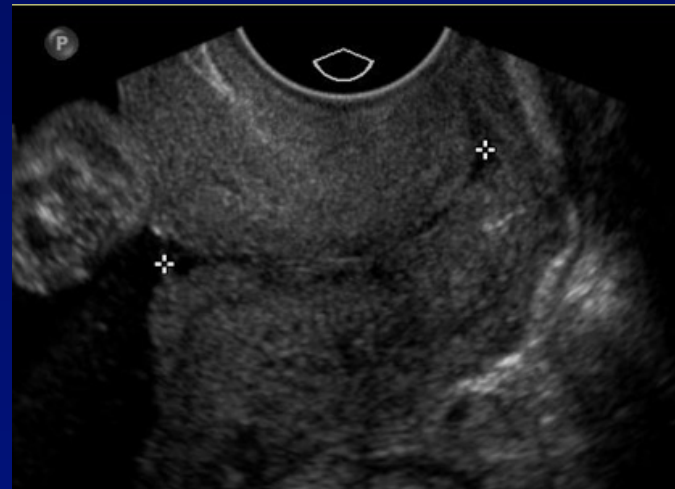
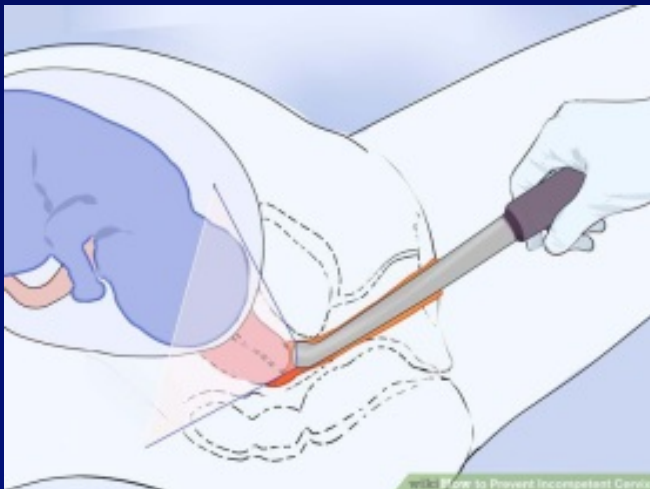
No history of previous preterm birth



No history of previous preterm birth

Universal cervical length screening at 18-20 weeks

Transabdominal scan => if $< 3\text{cm}$ then perform
transvaginal scan



Is the cost worth the effort??

Variable	Base Cost (CAN\$)
CL scan (19-24w)	104. 79
Progesterone (if CL < 20mm)	1 612.00
Cost of maternal care	
<28w	9680.70
28-34w	9689.70
34-37w	4031.25
Cost of neonatal care	
<28w	105 459.00
28-34w	24 773.00
34-37w	5 397.00
Lifetime cost of disabled child	932 412.18

For every 100 000
women screened:

\$ 4 023 552 would
be saved

No history of previous preterm birth

Universal cervical length screening at 18-20 weeks
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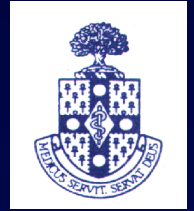
If CL $<20\text{mm}$ start vaginal
progesterone, weekly CL
surveillance and refer to MFM
Specialist

No history of previous preterm birth

Universal cervical length screening at 18-20 weeks
Transabdominal scan => if $<3\text{cm}$ then perform
transvaginal scan

If CL 20-25mm continue
weekly surveillance with
TVUS until 28 weeks

Cerclage could be considered following discussion
between pt and physician



Thank you

- Dr. Noor Ladhani
- Noelle Ma

clear

Cervical Length Education and Review

Bringing Patient Safety to the Forefront...



The Fetal Medicine Foundation