

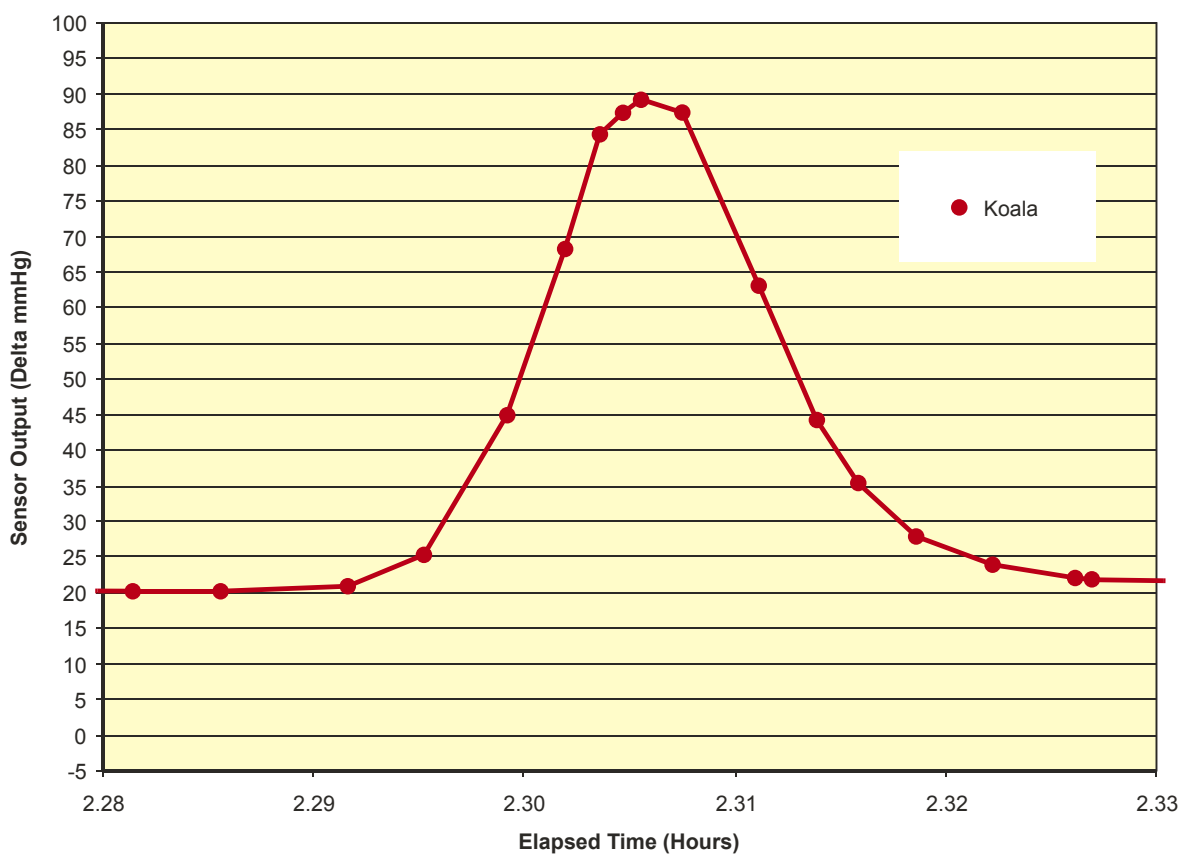
## What is Wrong With this Picture?

### Situation:

Using a Koala® IPC 5000E balloon-tipped catheter, you obtain the intrauterine pressure trace below with a “resting tone” of 21 mmHg and a peak contraction pressure of 90 mmHg.

Would you consider this trace to be an accurate reflection of uterine activity?

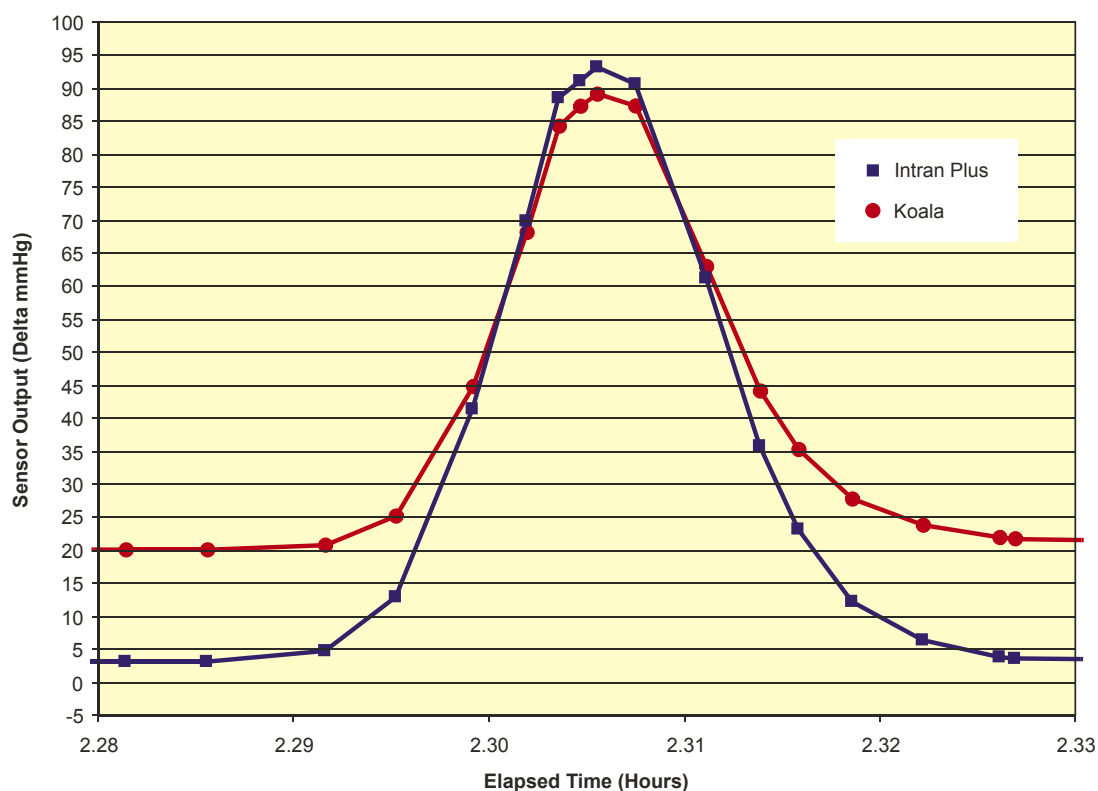
Koala® IPC 5000E Pressure Trace



# Intrauterine Pressure Monitoring Balloon-Tipped vs. Transducer-Tipped Catheters

## Would You Know the Trace Was Inaccurate?

Now we add Intran<sup>®</sup> Plus to the same liquid-filled pressure vessel under controlled conditions<sup>1</sup> with an obstruction against the catheter tips to simulate contact with maternal or fetal tissue. Notice the differences in resting tone and amplitude of peak pressure.



**The difference in these two pressure traces is clinically important because...**

- The strength of each contraction is important in assessing the progression of labor. The strength of the contraction as measured by Koala was 69 mmHg (peak minus baseline), while Intran measured 90 mmHg. With the Koala measuring only 77% (69/90) of the true strength of the contraction, an incorrect clinical conclusion about the change in amplitude is possible.
- Assessing baseline pressure between contractions is a key to determining if intervention is necessary. A much higher resting tone was reported using Koala with a partially obstructed balloon. If the Koala balloon became more (or less) obstructed after ensuing contractions and the reported resting tone increased (or decreased), would you infer the right conclusions about uterine activity?
- The relationship of the IUP tracing with FHR and palpation indicators should provide information that allows a clinician to reduce the risk of an acceleration of events leading to an unwanted outcome. Is accepting inaccurate pressure traces, or not knowing, consistent with the IUP monitoring objective of reducing risk?

<sup>1</sup> Test apparatus designed by Raynes Engineering, Inc.