



The Efficacy and Success Rate of Methotrexate in the Management of Ectopic Pregnancy

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Background

- **Ectopic pregnancy** is a **life-threatening** medical condition where the pregnancy is found **outside the uterus**, with a local rate in Saudi Arabia being **0.58-1.13%**.
- **Methotrexate (MTX)** has been used as the medical therapy for **stable patients** who want to **preserve their fertility and avoid surgery and its complications**.

Methods

- A **retrospective cohort** study included **59** patients with ectopic pregnancy treated with MTX at KAMC- Jeddah, between **2016-2021**.
- Data was collected via an electronic medical record system (**BestCare**), stored and analysed using the **Excel** program and **Statistical Package for the Social Science Software** respectively.

Discussion

- The **success rate of MTX** treatment using the **% drop in hCG on day 4 and 7** after the 1st and 2nd dose of MTX was **56%** and **93.8%** respectively.
- The **clinical outcome** after MTX management in ectopic pregnancy was **significant with a p-value <0.05**, suggesting successful fertility.
- **10 cases** reported **ruptured ectopic pregnancy**, of those, **7 underwent surgery**, while **3** were managed successfully with **MTX**.
- **10 patients** underwent surgery, **6 of them** due to **ruptured ectopic pregnancy**, with the remaining due to failed medical treatment with can be due to other factors.
- A **fifth** had history of ectopic pregnancy, **12%** had previous tubal surgery and **9%** had assisted conception.

Objectives

- Evaluate the **efficacy of MTX** in treating patients diagnosed with **early ectopic pregnancy** from **2016-2021** at King Abdulaziz Medical City (KAMC), Jeddah- Saudi Arabia.
- Investigate the **clinical outcomes** of **subsequent pregnancies** after an ectopic pregnancy treatment.

Results

Figure 1: % Drop in hCG Post MTX 1st Dose Treatment

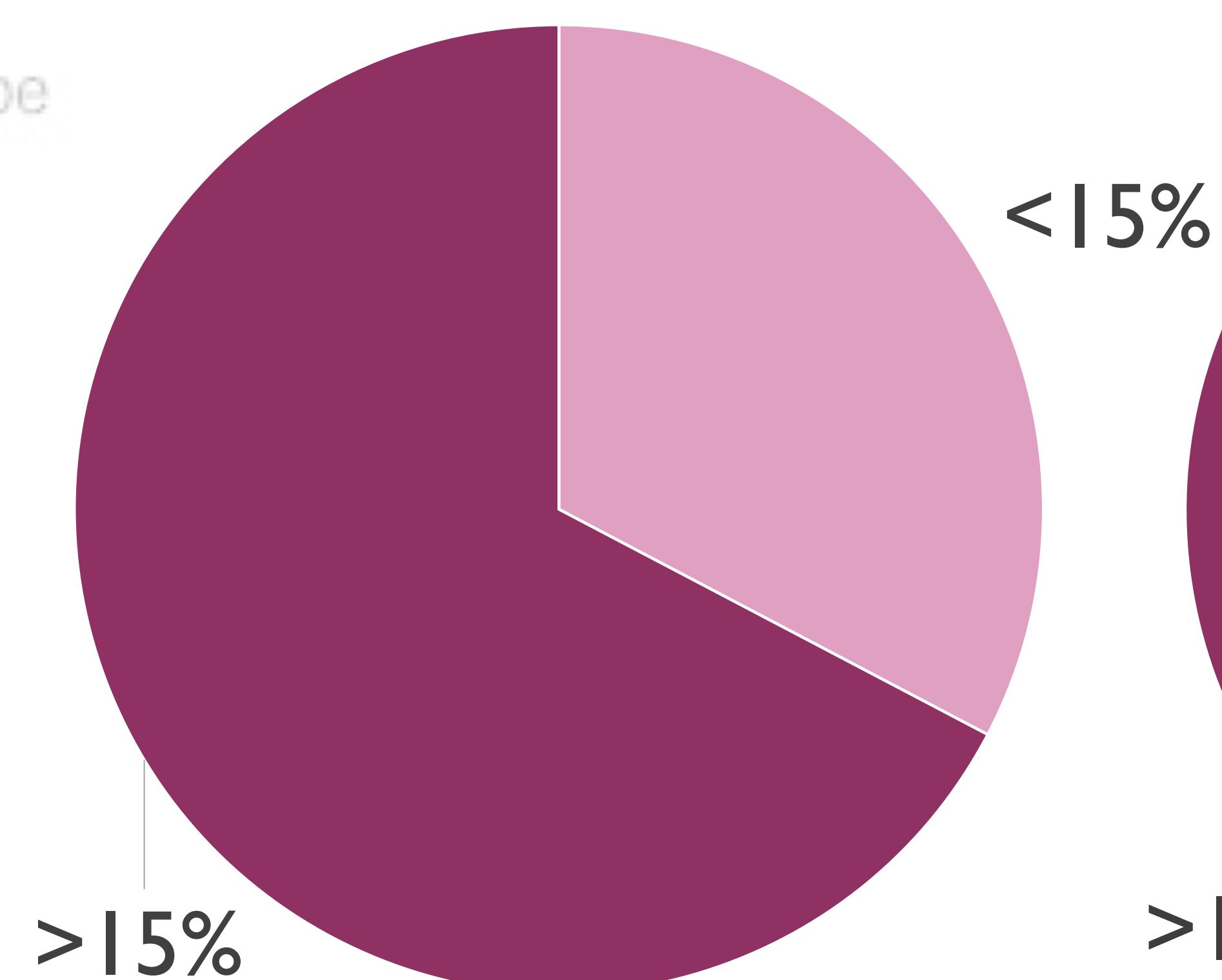


Figure 2: % Drop in hCG Post MTX 2nd Dose Treatment

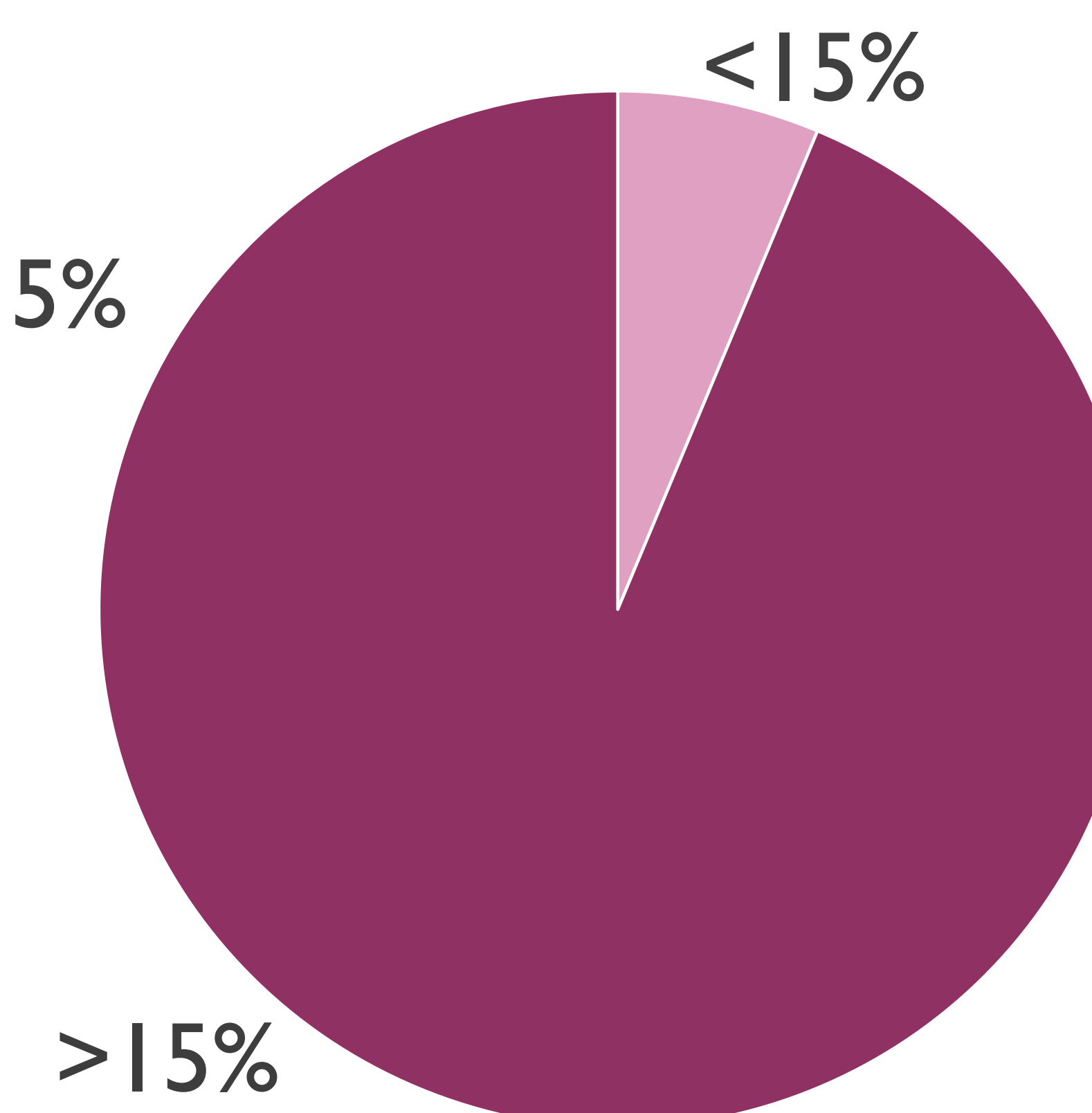
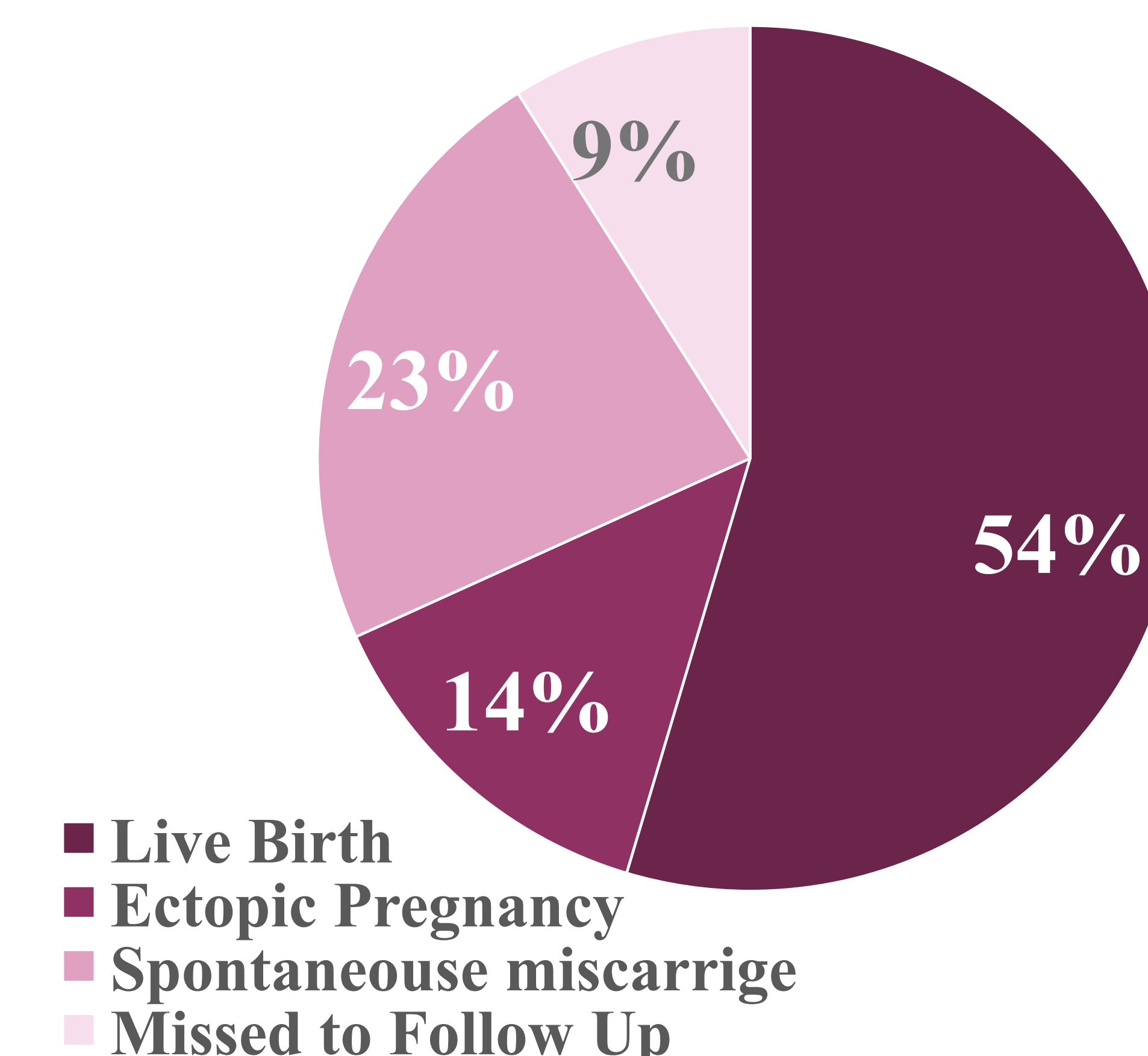


Figure 3: Outcome of Post MTX Treatment of Ectopic Pregnancy



Conclusion

- MTX use in the treatment of ectopic pregnancy was **effective with a hCG drop of >15%** consistent with other studies.
- The patients who received a **second dose** showed a **higher drop** in hCG.
- Field contribution **reduction of invasive surgical procedures**.

References

