



ROLE OF WADDLIA CHONDROPHILA IN MISCARRIAGE

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Background

Waddlia is a *Chlamydia*-related bacteria multiplying in endometrial cells and macrophages (1-3). *Waddlia* anti-IgG antibodies was associated with miscarriage (4). Moreover, *Waddlia* was present in the placenta of a patient with miscarriage (5). Thus, the role of *Waddlia* in miscarriage is likely.

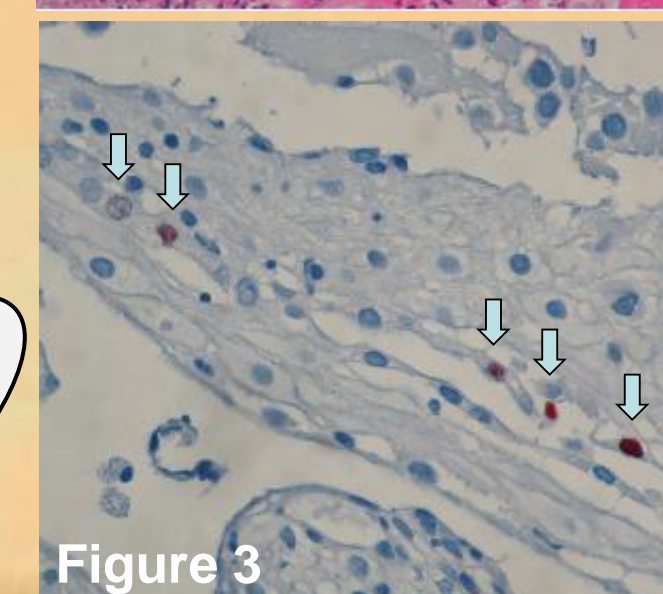
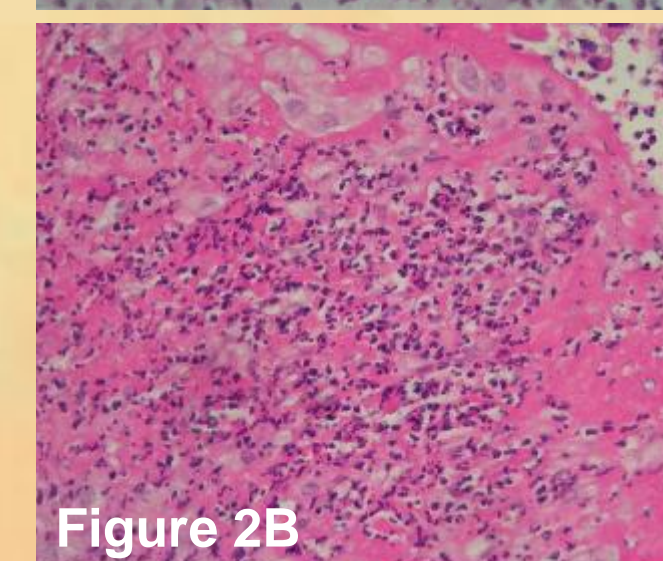
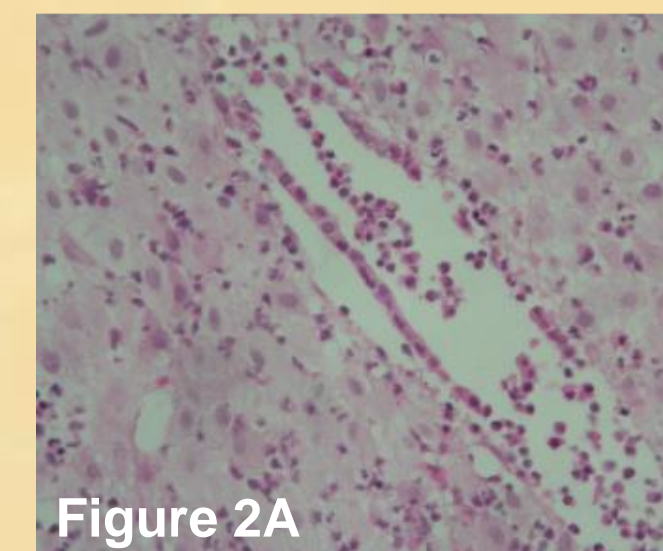
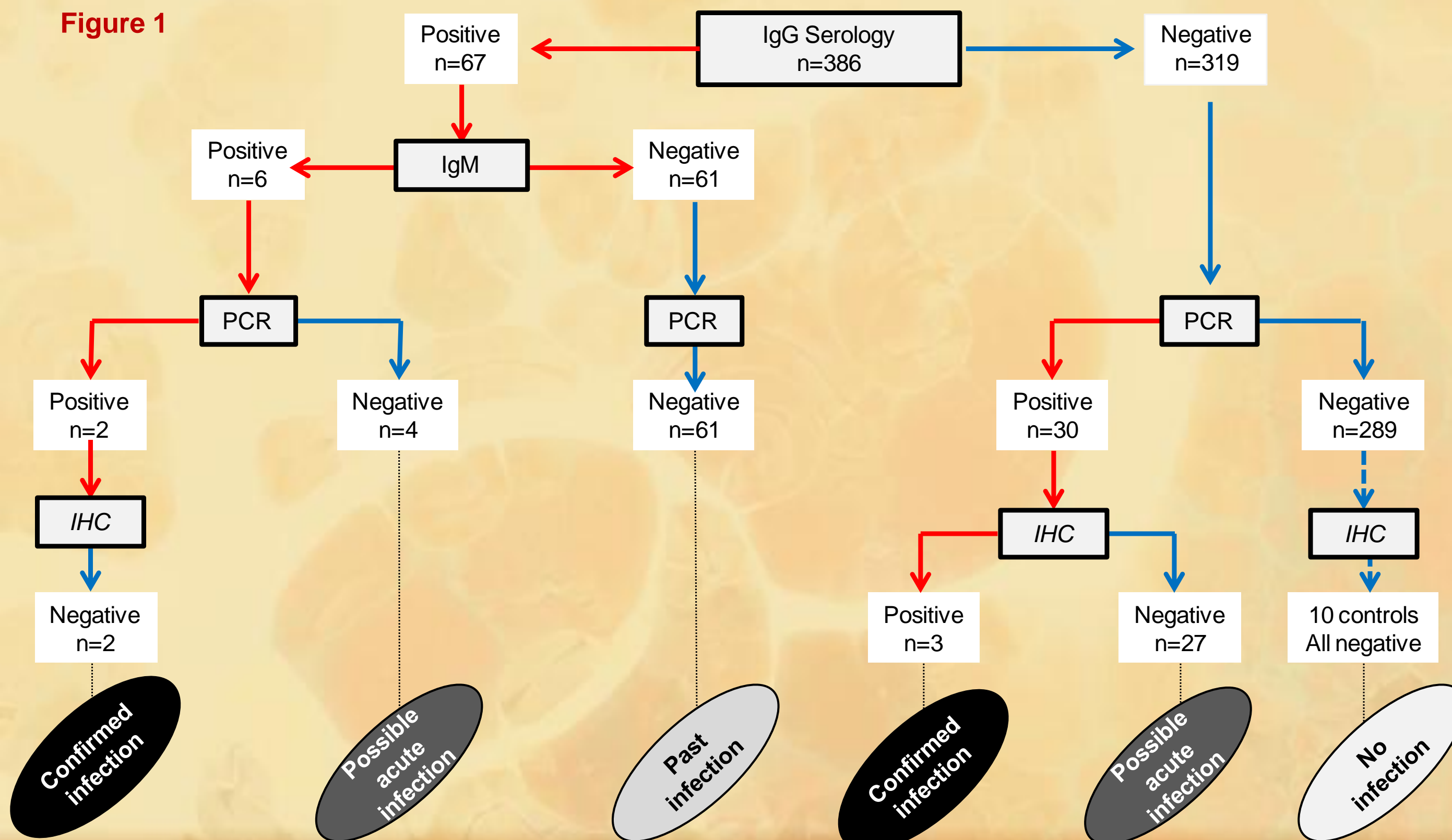
Methods

To confirm this, we collected placenta, vaginal swabs and sera from women with and without miscarriage. Serology, PCR, and immunohistochemistry were performed on samples taken at time of miscarriage or delivery.

Results

Waddlia anti-IgG antibodies were detected in **23.2%** of sera from patients with miscarriage and in 14.6% of controls (**p=0.044**). A total of 5 infections were confirmed by at least two congruent positive *Waddlia* tests (Figure 1). Among 125 patients with miscarriages, 10 exhibited a positive *Waddlia* PCR in placenta or in the vaginal swab. All ten presented an inflammatory infiltrate at histological examination (Figures 2A and 2B). Moreover, immunohistochemistry confirmed the presence of *Waddlia* in the placenta of 2 of them (Figure 3).

Figure 1



Conclusion

These results suggest a role of *Waddlia* in human miscarriage. Etiological investigations of a miscarriage should include *Waddlia* to prevent recurrent fetal death.

References

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