Clinical otosclerosis is present in about 1% of the population, and is twice as likely to occur in women than in men. It commonly manifests in the 2nd and 3rd decades of life. There is a long-standing belief that hearing loss resulting from otosclerosis can worsen during pregnancy. However, the existing empirical research is reviewed in order to answer the question: Does pregnancy affect otosclerosis?

A systematic review of the existing literature was conducted. Searches were run in PubMed, CINAHL, EMBASE, and Scopus electronic databases between January 22nd and February 18th, 2015. Search terms were: ‘otosclerosis’, ‘otospongiosis’, and pregnancy. Where available, these were searched as subject headings or MeSH terms in order to be as inclusive as possible. Supplementary searches of the reference lists of yielded studies.

Method

Articles were appraised using the Crowe Critical Appraisal Tool (CCAT) Version1.4. Papers were also given a level and grade based upon standards developed by Cox (2005). Briefly, levels 1-6 related to the type of evidence provided and grades A-D related to the relationship between the level of the study and the consistency of its conclusion.

Conclusions

- The best evidence available on the effects of pregnancy on otosclerosis suggest that there is no decrease in hearing ability resulting from pregnancy.
- While the two most recent studies are methodologically strong, there is still room for additional studies.

Conclusion

Studies were included in this review if they contained original data on human participants and were accessible through Western Libraries in English. Accordingly, papers were excluded if they were duplicates, review papers, if they used non-human subjects, or if they were not accessible through Western Libraries. Conference abstracts or communications were also excluded.

References