**Presentation title:** Confused about what to do with ear pus? Let’s discuss the evidence and our otitis externa study.

**Abstract** (max. 300 words):

Introduction

An audit of otitis externa presentations to Hedland Health Campus Emergency Department over a 14-month period was carried out to look for trends in seasonal presentations, microbiology, association with patient activities such as swimming and smoking, and compliance with any available adult and paediatric guidelines.

Methods

A search of our emergency department database was undertaken to look for all otitis externa presentations between 1 December 2015 to 1 April 2017. Information about patient demographics and treatment given was matched with microbiology results from our pathology provider. Data was analysed for trends associated with temperatures and rainfall levels, swimming, microbiology patterns and antibiotic susceptibilities. Documented management was also compared to best practice recommendations from any available adult and paediatric guidelines

Results

A total of 236 presentations representing 193 individuals were identified in our emergency department records. 28 individuals had microbiology results available for swabs taken at time of presentation. There was good documentation regarding management and choice of antibacterial agent, however, because of lack of consensus in guidelines it was difficult to ascertain it it always matched recommended best pratice.

Conclusion

With the ever present threat of climate change it is important to develop a better understanding of the link between climate and disease patterns. Otitis externa is strongly linked with swimming, and regions with tropical climates may experience a higher incidence of fungal infections. Increasing temperatures and changing seasons may affect the way in which otitis externa presents in the future.