Nasal Culturing in a Child and Adult (not the two patients in this study)

INTRODUCTION

Treatment of Ear, Nose and Throat infections is largely based upon guesswork and clinical experience rather than objective testing. All three areas communicate with the nasal cavity and infectious agents may first enter the upper respiratory tract via the nose. Intranasal culturing is a simple, low cost approach for identifying the cause of a patient’s upper respiratory tract infection.

Numerous studies along with clinical experience support the increasing problem of what is called chronic infection when it likely represents antibiotic failure. There is an overt lack of ambulatory care interest in stemming this trend by considering a simple culturing technique. Cost often drives antibiotic choice or reluctance to use more potent antibiotics in the interest of “saving them” for future use. Unfortunately none of this methodology is supported by sound clinical decision making. In most communities the commonly used antibiotics are ineffective against the common now-seen pathogens. The following case presentation clearly illustrates how nasal culturing can save lives and improve clinical antibiotic selection.

METHODS AND MATERIALS

A thirteen month old male (patient 1) presented in January 2009 with a four month history of recurrent otitis media and upper respiratory congestion increasing. He had been treated empirically with four different antibiotics. He experienced bilateral TM perforations with drainage, and grew sicker. In fact two of his episodes of otitis media were treated without antibiotics and one of those episodes led to a TM perforation. When he presented for consultation a nasal culture was obtained. (Figure 1)

A thirty-four year old woman (patient 2) presented that same month with a three-week history of intractable sinusitis. Her two empiric antibiotics failed to control her sinus headaches, nasal congestion, and low-grade fever. A nasal culture was taken. (Figure 2)

DISCUSSION

When antibiotics were first employed, culture directed therapy was the norm. In today’s outpatient clinical environment upper respiratory culturing has lost favor and in its place an increasingly ineffective approach to treating ENT infectious disease. Bacterial antibiotic resistance can spread throughout a community or in this case, a neighborhood. Not until a culture was taken and acted upon did either of these patients improve.

CONCLUSIONS

Nasal culturing should become a standard in treating ENT infectious disease. Empirical antibiotic decision making will only hasten the end of the antibiotic era. Yet not before many patients will grow sicker and more expensive to manage as a result of so called under treatment.