ARTICLE:


• Country: Great Britain

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PURPOSE:

• Research Question(s): Can structured history and physical elements predict adverse outcomes of acute sore throat. (in goal to prevent excessive ABX prescriptions)

• Hypothesis: none

DESIGN:

• Study Design:
  - Major types of quantitative designs: observational cohorts, and a randomized trial for clinical score and rapid antigen testing.
  - Prospective

• Dependent / outcome Variable(s): suppurative complications, quinsy, otitis media, sinusitis, impetigo, or cellulitis

• Independent / research Variable: clinical history, clinical predictor scores.

SETTING / SUBJECTS:

• Research Setting: primary care clinics outpatients.

• Subjects: previously well patients aged 16 or more with acute uncomplicated illness (≤14 days), who presented with sore throat as the main symptom and had an abnormal examination result of the pharynx

  - Inclusion / Exclusion criteria:
• severe mental health problems (for example, cognitive impairment associated with being unable to consent or assess history)
• complicated illness (for example, complication at presentation or incipient complication; immune suppression).

  o Number (control / intervention groups): Diagnostic cohorts 1077, Randomized trial 1781 full study 14610 person’s
  o Demographics: See Table 1
  o Attrition: not reported

METHODS:
• Interventions: cohort based off one page proforma documenting clinical features, to evaluate adverse outcomes, as noted as new diagnoses in the next month after initial visit. Or post-card follow up. Desired patients not treated with ABX. Attempted to cluster generally by practice provider
• Study Groups: cohort
• Instruments: one page proforma.
• Data Collection: collected by staff members and research assistants at primary care clinics. Various providers with various levels of training. The proforma underwent multiple revisions throughout the study.

DATA ANALYSIS:
• Level of Data: Categorical data.
• Statistics Used: multivariate models, attempting to control ABX, practice clustering,
  o Created a clinical core based of identified independent variables for complications.
  o Evaluated previously identified clinical scores Centor, and FeverPAIN
• What, if any, variables were controlled for?: see above. Ended up including patients receiving ABX as this would have skewed the population and results.

RESULTS:
• Brief answers to research questions: complications occurred in approximately 1% (regardless of ABX).
  o Predictors of complications were
    ▪ Severe tonsillar inflammation, 13%
    ▪ Severe ear ache 5%
    • Together still 70% of complications without either
  o Centor Score 4 or greater sensitive 9.7%
    ▪ No independent variables
  o FeverPAIN 4 or more, 12.7% sensitivity
    ▪ More complications with less than 2 on Centor

NO good clinical predictor
• **Additional findings:** as above

• **Other possible explanation for findings:** as a cohort, this is biased towards practice variability for ABX use, however, ABX use did not seem to greatly alter the outcomes.

• **Limitations:** Are their important limitations identified by the authors?
  
  o Use of NSAIDS and Steroids
  o Type two error due to not enough people
  o Sinusitis, otitis media diagnoses are vague, included as complications
  o
  o Do you see any other important limitations? None other than the obvious. Cohort study, dependent on helter-skelter data collection in multiple clinics.

**IMPLICATIONS FOR PRACTICE:**

• **Applicable to this clinical practice:** yes, it is applicable to our clinical practice.

• **Feasible (cost, resources, etc):** this study is feasible, however, it really just attempts to find a way to predict poor outcomes. It may, in its fringe consequences, push me from using ABX in folks with acute sore throat as it does not seem to alter the development of adverse outcomes.

• **Clinically Relevant:** this is relevant, but probably not overly practice changing. I may just spend more time explaining possible poor outcomes, and our inability to accurately predict them.

**LEVEL OF EVIDENCE / DECISION FOR USE:**

• Background

• **Level of Evidence:**
  
  III Well-designed non-experimental studies
  IV Expert committee reports, opinions of experts

**random notes:**
quinsey: peritonsillar abscess
middle age men who smoke: higher risk for suppurative complications.