ACUTE BACTERIAL RHINOSINUSITIS

TOPICS:

1) Acute rhinosinusitis is one of the most common conditions that physicians treat in ambulatory practice. Although often caused by viruses, it sometimes is caused by bacteria, a condition that is called acute bacterial rhinosinusitis.
2) Because two thirds of patients with acute bacterial rhinosinusitis improve without antibiotic treatment and most patients with viral upper respiratory infection improve within seven days, antibiotic therapy should be reserved for use in patients who have had symptoms for more than seven days and meet clinical criteria.
3) The ostiomeatal complex, the area at the confluence of drainage from the sinuses, is particularly vulnerable to inflammatory changes, swelling, and obstruction. The inflamed, swollen mucosa of the nasal and sinus cavities leads to obstruction of the openings of the sinuses, or ostia. Unable to circulate air and eliminate the secretions that are normally produced, the sinuses then become an ideal environment for bacterial infection. Furthermore, due to anatomical conformation, is very difficult for drugs to reach sinuses mucosa.
4) If an episode of acute bacterial rhinosinusitis is not totally solved, due to a not effective eradication, patients could get relapses, and relapses could lead to chronic sinusitis. Then the only way to solve chronic sinusitis is a surgical procedure.

OUR GOAL:

To reach effectively sinuses mucosa.

To eradicate bacteria proliferating in sinuses mucosa

To help human body defense

THE CALL:

Above all we have to reach effectively the mucosa of sinuses in a concentration still good to strike down, to eradicate, bacteria present. Then we have to eradicate totally the bacteria, helping human body defense:

Prulifloxacin is well distributed to the body's tissues, and has a very important entry rate in mucosa sinuses[1,2]

Prulifloxcin has the best MIC vs the bacteria most common responsible of ABRS [3,4,5,6]

Prulifloxacin is the best fluoroquinolone entering in active form into polymorphonuclear cells. It enhances the phagocytic activity of polymorphonuclear cells, and modulates the synthesis of pro inflammatory cytokines promoting polymorphonuclear cells activity[7,8,9]

CLAIM:

Solve once for all the rhinosinusitis and avoid the surgeon

1)Passali et al. "Role of prulifloxacin in the treatment of acute rhinosinusitis" Infez Med. 2015 Dec 1;23(4):301-6.

2)De Benedetto et al. “Penetration of prulifloxacin into sinus mucosa of patients undergoing paranasal sinus elective endoscopic surgery” J. Chemother. 24, 26-31, 2012

3)Montanari et al. “In vitro antibacterial activitiesof AF 3013, the active metabolite of prulifloxacine, against nosocomial and community Italian isolates” Antimicrob Agents Chemoter 2001

4) D. E. Karageorgopoulos et al. “Antimicrobial activity of prulifloxacin in comparison with other fluoroquinolones against community-acquired urinary and respiratory pathogens isolated in Greece” Eur J Clin Microbiol Infect Dis 2013

5) Prats et al. “In vitro activity of the active metabolite of prulifloxacin (AF 3013) compared with six other fluoroquinolones.” Eur J Clin Microbiol Infect Dis 2002;21:328-334

6)Pallecchi et al “Antipneumococcal activity of ulifloxacin compared to levofloxacin and ciprofloxacin.” J Chemoter 2011; 23/5):3-5

7)Ozaki et al. “Uptake and intracellular activity of NM394, a new quinolone, in human polymorphonuclear leukocytes” Antimicrob Agents Chemoter 1996

8)Tullio et al. “cellular uptake and intraphagocytic activity of the new fluoroquinolone af 3013 against klebsiella pneumoniae” Drugs Exp Clin Res. **1999**;25(1):1-11.

9)Reato et al. “Immunomodulating effect of antimicrobial agents on cytokine production by uman polymorphonuclear neutrophils” International Journal of Antimicrobial Agents 2004; 23, 150-154.