

Sinusitis

'It's my sinus again, doc!' Sinusitis, or more correctly rhinosinusitis, is a condition characterised by mucosal inflammation of the nasal mucosa and paranasal sinuses, leading to nasal obstruction, facial pain and nasal discharge. It is a frequent presentation to Australian general practice, ranking in the top 20 most common problems managed. It can be a difficult condition to assess and treat, especially when a chronic problem.

<p>TEACHING AND LEARNING AREAS</p> 	<ul style="list-style-type: none"> • Anatomy of the sinuses • Clinical features of acute and chronic rhinosinusitis, including red flag symptoms of serious disease (complicated acute bacterial rhinosinusitis) • Differential diagnoses • Indications for investigation • Approach to treatment, both symptomatic and indications for antibiotics/steroids • How to undertake nasal irrigation • Indications for referral and appropriate pathways 						
<p>PRE-SESSION ACTIVITIES</p>	<ul style="list-style-type: none"> • Read the 2016 AFP article Sinusitis 						
<p>TEACHING TIPS AND TRAPS</p> 	<ul style="list-style-type: none"> • Rhinitis is a very common accompaniment of acute sinusitis • Bacterial rhinosinusitis is typified by high fever, protracted course, severe facial pain, and a purulent nasal discharge • Bacterial rhinosinusitis is often self-limiting, and antibiotics make little difference to the course of the illness • Sinus X-rays are rarely helpful and CT scans only indicated for specific indications – patients failing medical therapy, with atypical or severe disease • Less than 2% of patients with acute rhinosinusitis develop a bacterial infection – thus, there is no place for antibiotics for the patient with uncomplicated acute rhinosinusitis in adults • Intranasal steroids have a modest benefit for acute rhinosinusitis • Facial pain in chronic sinusitis is uncommon and other causes should be sought • Consider formal allergy testing in patients with chronic rhinosinusitis and allergic symptoms • Chronic rhinosinusitis commonly coexists with asthma • The presence of nasal polyps in chronic rhinosinusitis influences treatment 						
<p>RESOURCES</p> 	<table border="1"> <tbody> <tr> <td data-bbox="335 1749 434 1854">Read</td> <td data-bbox="434 1749 1490 1854"> <ul style="list-style-type: none"> • Therapeutic Guidelines chapter on Rhinosinusitis • Read the 2016 Australian Prescriber article Acute sinusitis and sore throat in primary care </td> </tr> <tr> <td data-bbox="335 1854 434 1960">Listen</td> <td data-bbox="434 1854 1490 1960"> <ul style="list-style-type: none"> • How to use a nasal spray correctly • How to irrigate the sinuses </td> </tr> <tr> <td data-bbox="335 1960 434 2033">Watch</td> <td data-bbox="434 1960 1490 2033"> <ul style="list-style-type: none"> • Cochrane podcast - Podcast: Treatments for chronic rhinosinusitis </td> </tr> </tbody> </table>	Read	<ul style="list-style-type: none"> • Therapeutic Guidelines chapter on Rhinosinusitis • Read the 2016 Australian Prescriber article Acute sinusitis and sore throat in primary care 	Listen	<ul style="list-style-type: none"> • How to use a nasal spray correctly • How to irrigate the sinuses 	Watch	<ul style="list-style-type: none"> • Cochrane podcast - Podcast: Treatments for chronic rhinosinusitis
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<p>FOLLOW UP/EXTENSION ACTIVITIES</p>	<ul style="list-style-type: none"> • Registrar to undertake clinical reasoning challenge and discuss with supervisor 						

Clinical Reasoning Challenge

Dan Grady, a 31-year-old chef, presents to you and says that his sinuses are 'playing up'. He says that he had a cold about 10 days previously and now he has facial pain and fullness, and a nasal discharge. He denies any significant medical history and says that his sinuses are 'not usually a bother'.

QUESTION 1. What are the MOST IMPORTANT key features of history to assess the likelihood of a bacterial rhinosinusitis? List up to FOUR.

- 1 _____
- 2 _____
- 3 _____
- 4 _____

QUESTION 2. There are no features to suggest a bacterial infection. What is the most likely diagnosis? List ONE diagnosis.

- 1 _____

QUESTION 3. What are the next actions in Dan's initial management? Select as many management actions from the following list as appropriate.

- Commence oral antibiotics
- Recommend regular oral analgesia
- Discuss saline irrigation
- Commence intranasal corticosteroids
- Refer for sinus x-rays
- Refer for sinus CT scan
- Refer for ENT opinion
- Commence nasal decongestants
- Commence oral decongestants
- Commence 5-day course of oral corticosteroids
- Commence oral antihistamines
- Assess smoking status
- Offer pneumococcal vaccination
- Refer for spirometry to exclude co-existent asthma
- Undertake swab for MCS of the nasal discharge

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ANSWERS

QUESTION 1

What are the MOST IMPORTANT key features of history to assess the likelihood of a bacterial rhinosinusitis?

- High fever
- Protracted course (longer than 7-10 days)
- Purulent nasal discharge
- Severe facial pain
- Improvement and then worsening of symptoms

QUESTION 2

There are no features to suggest a bacterial infection. What is the most likely diagnosis?

- Acute viral rhinosinusitis

QUESTION 3

What are the next actions in Dan's initial management? Select as many management actions as appropriate.

- Recommend regular oral analgesia
- Discuss saline irrigation
- Commence intranasal corticosteroids
- Commence nasal decongestants
- Commence oral decongestants
- Assess smoking status