Scenario Clinico (1)

- Gustavo è un ex dirigente d'impresa di 66 anni, con storia d'ipertensione arteriosa trattata con nifedipina. Fuma sigari.
- Da due giorni presenta febbre elevata (sino a 40 °C), che non è sensibile al paracetamolo.
- All'esame obiettivo: murmure vesicolare normotrasmesso, crepitazioni in campo medio dx. Toni cardiaci validi, ritmici, pause libere. Non edemi declivi. Non segni di TVP.
- Rx torace: esteso focolaio broncopolmonare del lobo medio di dx. Non segni di versamento pleurico.

Scenario Clinico (2)

- In considerazione delle buone condizioni generali, l’assenza di fattori di rischio - score di Fine 81 (Classe III) - e di insufficienza respiratoria, il paziente viene inviato in Day Hospital, dove inizia terapia antibiotica (ceftriaxone 1gr IM + claritromicina 500 mg 1 cpr x 2).
- Le sierologie per Legionella, Mycoplasma e Chlamydia risultano negative.

Scenario Clinico (3)

- In ottava giornata esegue controllo Rx: “detersione del parenchima polmonare in regione lobare media di dx per parziale risoluzione del grossolano addensamento segnalato”.
- Sospende terapia antibiotica in 14° giornata, ed una Rx di controllo in 20° giornata mostra “ulteriore riduzione in estensione e densità dell’addensamento parenchimale in sede lobare media dx”.

Vecchi e nuovi chinolonici
Vantaggi per chi?

Roberto Nardi
Cortellini Gabriele
Cordioli Giampaolo
CLINICAL QUESTIONS

2A. Ritieni corretta la decisione di non ospedalizzare il paziente?
1. Sì
2. No

2B. Nella gestione domiciliare del paziente con CAP è sufficiente il trattamento con antibiotici per via orale?
1. Sì
2. No

2C. Quale classe di antibiotici ritieni più appropriata per il trattamento ambulatoriale delle CAP?
1. Beta-lattamici
2. Cefalosporine
3. Macrolidi
4. Fluoroquinoloni
5. Una variabile associazione dei precedenti

2D. Ritieni che i chinolonici di nuova generazione, rispetto ai “vecchi”, offrano vantaggi considerevoli per il paziente?
1. Sì
2. No
3. Non so, non rispondo
Fine MJ, Auble TE, et al.

A prediction rule to identify low-risk patients with community-acquired pneumonia


Table 1. Point scoring method for low-risk patients. The decision tree from Fine et al. is simplified and used for the present classification system.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age over 60</td>
<td>+20</td>
</tr>
<tr>
<td>Smoking status</td>
<td>+10</td>
</tr>
<tr>
<td>Respiratory rate &gt; 24 breaths/min</td>
<td>+10</td>
</tr>
<tr>
<td>Comorbidity score &gt; 2</td>
<td>+20</td>
</tr>
<tr>
<td>Fever &gt; 38°C</td>
<td>+10</td>
</tr>
<tr>
<td>Physical examination on the edge</td>
<td>+10</td>
</tr>
<tr>
<td>Temperature &lt; 37°C</td>
<td>-20</td>
</tr>
<tr>
<td>Baseline blood pressure &gt; 90 mmHg</td>
<td>+10</td>
</tr>
<tr>
<td>Initial BUN &gt; 14 mg/dl</td>
<td>-20</td>
</tr>
<tr>
<td>Creatinine &gt; 1.5 mg/dl</td>
<td>-20</td>
</tr>
<tr>
<td>Creatinine clearance &lt; 30 ml/min</td>
<td>-20</td>
</tr>
<tr>
<td>Initial glucose &lt; 60 mg/dl</td>
<td>-20</td>
</tr>
<tr>
<td>Pneumonia not in the lung</td>
<td>-20</td>
</tr>
<tr>
<td>Infection not in the lung</td>
<td>-20</td>
</tr>
<tr>
<td>History of diabetes</td>
<td>+10</td>
</tr>
<tr>
<td>Oxygen saturation &lt; 90%</td>
<td>-20</td>
</tr>
<tr>
<td>Pneumonia not in the lung</td>
<td>-20</td>
</tr>
<tr>
<td>Infection not in the lung</td>
<td>-20</td>
</tr>
<tr>
<td>Need for mechanical ventilation</td>
<td>-20</td>
</tr>
<tr>
<td>Mortality risk &gt; 50%</td>
<td>-20</td>
</tr>
</tbody>
</table>

Verheij T, Kochen M, Hoepelman IM, Lammers JW, Macfarlane J, Woodhead M.

Antibiotics for community acquired pneumonia in adult outpatients

(Protocol for a Cochrane Review)


- Objectives
  - To assess the effectiveness of the different antimicrobial therapies in adult outpatients with CAP

- Types of outcome measures
  - Clinical response
  - Frequency of hospitalization
  - Mortality

Pomilla PV, Brown RB

Outpatient treatment of community-acquired pneumonia in adults

Arch Intern Med 1994;154:1793-802

- Etiologic diagnosis is helpful in determining appropriate outpatient treatment for community-acquired pneumonia, and usually requires only sputum Gram's stain analysis.
- Viral, mycoplasmal, and chlamydial agents are among the most common pathogens encountered in individuals treated as outpatients, although much variability exists.
- Many oral antibiotic trials for community-acquired pneumonia have been published, but shortcomings in study design limit their clinical applicability.
- A treatment algorithm is offered, using the best available data.

- Two RCTs found evidence that, in immunocompetent people admitted to hospital who were not suffering life threatening illness, intravenous antibiotics were no more effective than oral antibiotics and were associated with increased length of hospital stay.
- Intravenous antibiotics are needed in people who cannot take oral medication because of severe nausea or vomiting, or who are bacteraemic or in septicemic shock.


Polmonite Acquisita in Comunità nell’Adulto
Principali linee guida

- British Thoracic Society, 2001
- American Thoracic Society, 2001
- Canadian Infectious Disease Society, 2000
- European Respiratory Society, 1998
- Infectious Diseases Society of America, 1998

British Thoracic Society

Guidelines for the Management of Community-Acquired Pneumonia in Adults

Thorax 2001;56 (suppl IV)

Keeley D

Guidelines for managing community acquired pneumonia in adults
Many recommendations remain based on the lowest grades of evidence

BMJ 2002;324:436-7
New guidelines from the British Thoracic Society for managing community acquired pneumonia in adults were published in December 2001 in Thorax.

They have been formulated using modern methods with explicit search strategies and appraisal criteria.

Recommendations are graded according to the strength of the supporting evidence.

They cover the assessment and management of pneumonia in the community as well as in hospital.

Many of the practical recommendations remain based on the lowest grades of evidence.

**Antibiotic management (section 8)**

**Empirical antibiotic choice in the community**

- Amoxicillin remains the preferred agent but at a higher dose than previously recommended.
- A macrolide (erythromycin or clarithromycin) is offered as an alternative choice and for those patients who are penicillin-sensitive.
- For those patients referred to hospital with suspected CAP, general practitioners may consider administering antibiotics immediately where the illness is considered to be life-threatening or where there are likely to be delays (over 2 hours) in admission.

**Metge CJ, Vercaigne L, Carrie A, Zhanel GG. The New Fluoroquinolones in Community-Acquired Pneumonia: Clinical and Economic Perspectives**

Ottawa, November 2001

Canadian Coordinating Office for Health Technology Assessment

Technology Overview n°5

**Empirical antibiotic choice for adults hospitalized with community-acquired CAP (Table 8)**

- New fluoroquinolones are not recommended as first line agents or for community use for pneumonia, but may provide a useful alternative in selected hospitalised patients with CAP.
- A fluoroquinolone active against S. pneumoniae is an alternative regimen for those intolerant of penicillins or macrolides or where there are local concerns over Clostridium difficile associated diarrhoea. However, experience with such newer fluoroquinolones in the treatment of CAP and their interaction and side effect profile is at present limited and further reported experience is required.
- Levofloxacin is the only recommended agent currently licensed in the UK.

**Analysis of the trials on an intention-to-treat basis indicates that the orally-administered new fluoroquinolones offer no statistically significant additional clinical successes against other antibiotics for the empirical treatment of CAP.**

**An evaluable subjects analysis found new fluoroquinolones to be slightly more effective in treating individuals diagnosed with CAP than comparator antibiotics.**

**The CMA indicates that new fluoroquinolones approved for use in Canada have a small cost advantage for a 10-day course of outpatient (oral) treatment, when compared to some recommended alternative regimens (clarithromycin, cefuroxime axetil + erythromycin), but not others (amoxicillin).**
• Decisions about the choice of empirical antibacterial treatment of CAP may involve other considerations:
  - the regional pattern of bacterial resistance
  - adverse drug reaction profiles
  - patient convenience.

• Concerns about cross-resistance among fluoroquinolones resulting from overuse should also be considered.

Resistance to levofloxacin and failure of treatment of pneumococcal pneumonia

• We describe four patients with pneumococcal pneumonia in whom empirical treatment with oral levofloxacin failed.

• In all four cases, an organism that either was resistant to levofloxacin before therapy or acquired resistance during therapy was isolated.

• None of the position papers published on community-acquired pneumonia since the introduction of fluoroquinolones for the treatment of pneumococcal pneumonia have suggested that a history of fluoroquinolone use should be a reason for caution in using one of these antimicrobials.


Si sottolinea quindi che

come tutti i fluoroquinoloni la levofloxacina non deve essere usata in pazienti con riflessioni tegumentarie o insorgere dopo un precedente uso di fluoroquinoloni.

e si ricorda che:

• i pazienti anziani sono più predisposti alle tendiniti;
• il rischio di reattiva di tendine aumenta con il trattamento con corticosteroidi;
• se si sospetta una tendinite il trattamento con la levofloxacina (o un altro fluoroquinolone) deve essere interrotto immediatamente e la tendinite trattata appropriatemente.

Dear Doctor Letter per la levofloxacina