Endocarditis Prophylaxis

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ESC 2015 algorithm for IE Dx

Clinical suspicion of IE

Modified Duke Criteria

Definite IE  Possible IE  Low
ESC 2015 algorithm for IE DX

Native valve

Prosthetic valve

Repeat ECHO, Imaging, CT

ECHO,
ESC 2015 Algorithm Dx

- Repeat ECHO,
- PET/CT
- Cardiac CT
- Imaging for embolic events
Prevention

- New guidelines propose continuing to limit antibiotic prophylaxis to patients at high risk of Infective endocarditis undergoing the highest risk dental procedures
- They highlight the importance of hygiene measures in particular oral and cutaneous hygiene
Prevention

- Good oral hygiene and regular dental review are more important than antibiotic prophylaxis to reduce the risk of IE

- Aseptic measures are mandatory during venous catheter manipulation and during any invasive procedure in order to reduce the rate of health-care IE
Prevention

- When indicated in other conditions they should be given in a single daily dose

- New antibiotics regimens have emerged in the treatment of Staphylococcal IE, including Daptomycin and combination of high doses Cotrimoxazole and Clindamycin
Cardiac conditions at highest risk for IE

Recommendation

Antibiotic prophylaxis should be considered for patients at highest risk for IE:

1) Patients with any prosthetic valve, including a transcatheter valve, whom any prosthetic material was used for cardiac valve repair

2) Patients with a previous episode of IE
Cardiac conditions at highest risk of infective endocarditis

3) Patients with CHD:

a) Any type of cyanotic CHD

b) Any type of CHD repaired with prosthetic material, surgically or by percutaneous techniques, up to 6 months after the procedure or lifelong if residual shunt or valvular regurgitation remains

c) Antibiotic prophylaxis not recommended for any other forms of valvular or CHD

4) Hypertrophic cardiomyopathy
Recommendation for prophylaxis of IE in high risk

Recommendations

A) Dental procedures

. Antibiotic prophylaxis should be considered for dental procedures requiring manipulation of the gingival or periapical region of the teeth or perforation of the oral mucosa
Recommenations for IE as per procedure

B) **Respiratory tract procedures:**

Antibiotic prophylaxis not recommended for respiratory tract procedures including bronchoscopy or laryngoscopy transnasal or endotracheal intubation
Recommendations for IE prophylaxis

C) Gastrointestinal or urogenital procedures or TOE

Antibiotic prophylaxis is not recommended for gastroscopy, colonoscopy, cystoscopy, vaginal or caesarian delivery or TOE

D) Skin and soft tissue procedures

Antibiotic prophylaxis not recommended for any procedure involving above

(ESC guidelines 2015)
Recommended prophylaxis for high risk dental procedures

<table>
<thead>
<tr>
<th>SITUATION</th>
<th>ANTIBIOTIC</th>
<th>SINGLE DOSE</th>
</tr>
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<tbody>
<tr>
<td>NO ALLERGY TO PENICILLIN OR AMPICILLIN</td>
<td>AMOXICILLIN OR AMPICILLIN</td>
<td>CHILDREN 50MG/KG ORALLY OR I.V</td>
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<tr>
<td>ALLERGY TO PENICILLIN OR AMPICILLIN</td>
<td>CLINDAMYCIN</td>
<td>20MG/KG ORALLY OR IV</td>
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Antimicrobial therapy

- Prolonged therapy with bacterial drug is the basis of IE treatment:
  - PVE at least 6 weeks
  - NVE 2-6 WEEKS
  - The indications and pattern of use of aminoglycosides have changed
  - No longer recommended in staphylococcal NVE
Summary

- Antibiotic Prophylaxis required in high risk patient for IE undergoing high risk dental procedures
- Antibiotic Prophylaxis not necessary for most of the other procedures like Gastrointestinal, Renal, Skin and Soft tissue
- Good oral hygiene superior to antibiotic prophylaxis
THANK YOU FOR LISTENING