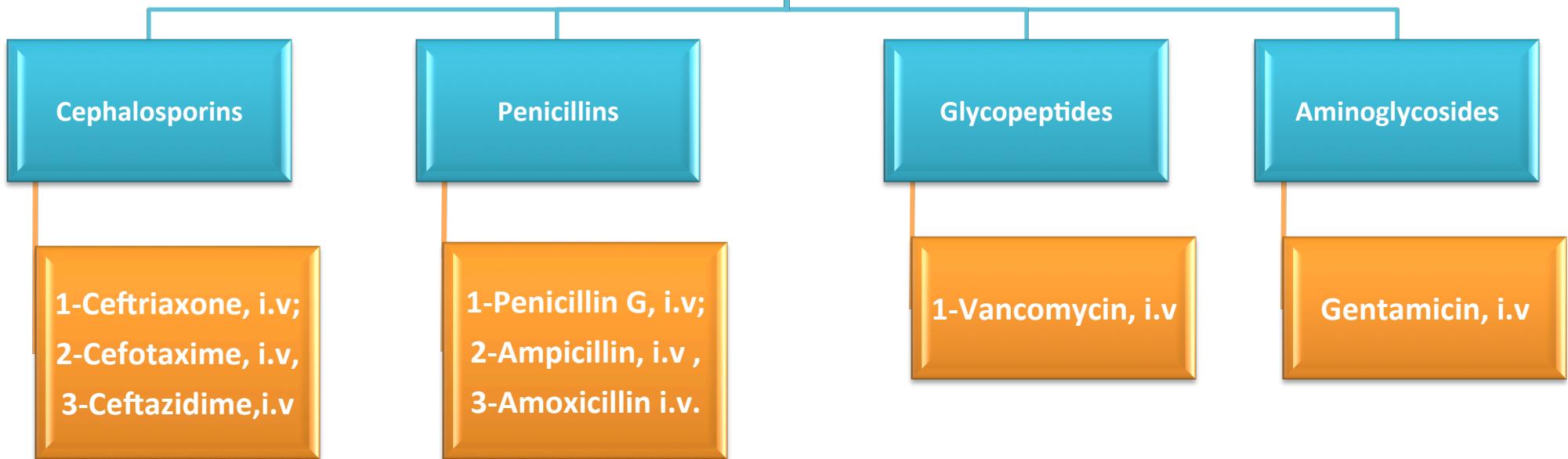


## Antibiotics for treatment of bacterial meningitis



|           | Cephalosporins   | Penicillins  | Vancomycin  | Aminoglycosides   |
|-----------|--|--|---|---|
| E.G + P.K | 1-Ceftriaxone<br>2-Cefotaxime<br>3-Ceftazidime (effective in <i>pseudomonas aeruginosa</i> ) | 1-Penicillin G (narrow spectrum) i.v.<br>2-Ampicillin (broad spectrum) i.v.<br>3-Amoxicillin (broad spectrum) i.v.                             | Given by <b>SLOW</b> i.v infusion   | 1-Gentamicin i.v.<br>(Antibacterial Spectrum)<br>Bactericidal (exclusive for <b>aerobic bacteria</b> )      |
| M.O.A     | Inhibits bacterial cell wall synthesis (Bactericidal)  |  |   | Inhibit protein synthesis<br>(30s subunit) (Bactericidal)   |
| A.E       | 1-Hypersensitivity reactions<br>2-Superinfections<br>3-Diarrhea<br>4-Thrombophlebitis        | 1-Hypersensitivity reactions<br>2-Superinfections<br>3-Diarrhea<br>4-May cause <u>convulsions</u> after high doses by i.v or in renal failure. | 1-Phlebitis at the site of injection<br>2-Ototoxicity<br>3-Nephrotoxicity (with high conc.)<br>4-Rapid infusion:<br>Histamine release (flushing of upper body ( <u>Red man or red neck syndrome</u> ))<br>5-hypotension {minimized if injected slowly}.   | 1-Ototoxicity<br>2-nephrotoxicity } directly related to serum conc.<br>3-Neuromuscular blockade (very dose) |
| USES      |  |  | -In combination with 3rd generation cephalosporins for treatment of <u>meningitis</u> caused by <u>penicillin resistant pneumococci</u> .<br><br>-Against <u>Methicillin resistant S.aureus (MRSA)</u> .<br><br>-Combined with <u>Ampicillin</u> or <u>Ceftazidime</u> as an initial therapy of <u>meningitis</u> in <u>infant</u> , <u>elderly</u> and <u>immunocompromised patients</u> . |   |



**Prevention better than cure**

## Vaccinations

1-Haemophilus influenzae type b (**Hib**) vaccines:  
routine childhood immunization

2-Pneumococcal polysaccharide vaccine (**PPSV**):  
for older children and adults

3-Meningococcal conjugate vaccine:  
people going to Hajj.