

★ Febrile Neutropenia

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Defⁿ ANC $< 500/\mu\text{L}$

^{OR} ANC expected to \downarrow to $500/\mu\text{L}$ in next 48 hrs (depth & duration)

Fever \rightarrow oral Temp. $> 38.3^\circ\text{C}$ (101°F) \times 1 time ^{or}
 $> 38^\circ\text{C}$ (100.4°F) \times 2 time / 12hr

Q. Why does a patients with chemotherapy & Neutropenia have more risks?

- ① central venous catheter
- ② Functional Neutropenia
- ③ Mucositis (eg; cytarabine therapy)
- ④ Altered humoral / cellular immunity
- ⑤ Malnutrition
- ⑥ Prolonged exposure to antibiotics
- ⑦ Frequent hospitalization.

Q. Clinical features :-

- Subtle
- High index of suspicion
- Head to toe } including IV cath. site. } 75-80% of patients with Febrile Neutropenia have a site of infection.
- examination

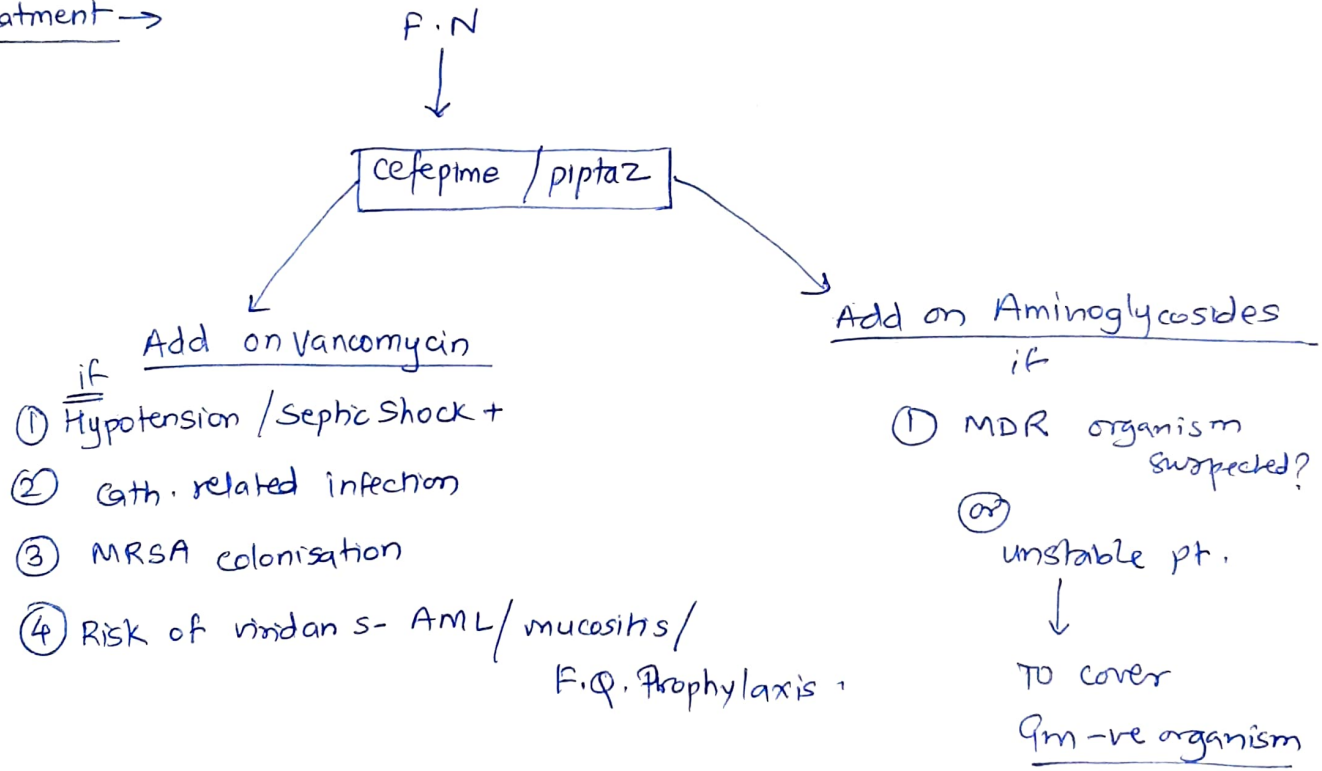
Q. Investigations :-

- 1) Blood culture / sensitivity
(Each port of CVC & peripheral vein).
- 2) URI symptoms \rightarrow Nasal aspirate, sinus film (prolonged).
- 3) Diarrhoea \rightarrow stool for virus; C. difficile toxin.
- 4) Urinary symptoms \rightarrow U.R/E, culture
- 5) LRI symptoms \rightarrow CXR (infiltrate absent in severe \downarrow N^o).
- 6) Abd. pain \rightarrow CT(abdo) to R/O Typhilitis
- 7) If not responding to antibiotics (> 96 hrs) \rightarrow consider Fungal etiology [esp. chest CT].
Fungal Biomarkers \rightarrow Galactomannan / β -D-glucan.

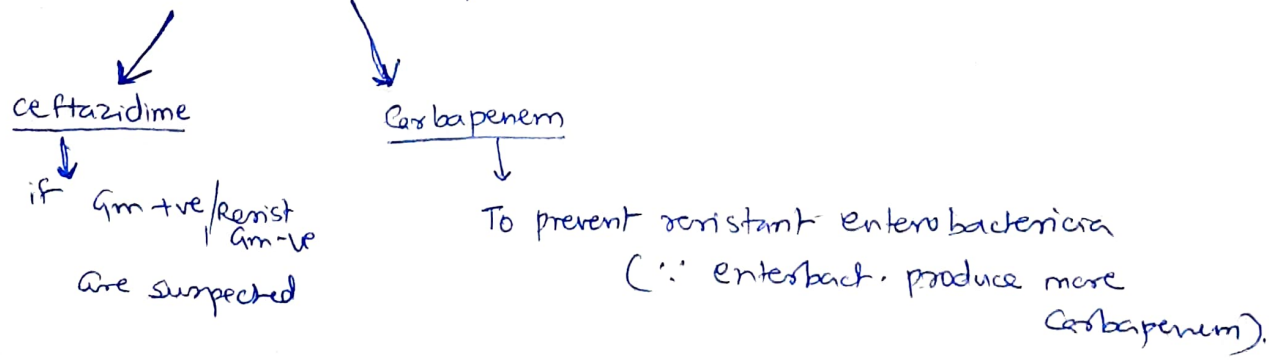
• Pathogens :-

- MC - Gram positive, others Gm -ve (Rx to cover).
- CRC associated = CoNS - Indolent
- mucositis 2° to cytarabine & pt. in Fluoroquinolone Rx } more prone to get strepto. viridans → presents as Toxic Shock Syndrome.
- Prolonged Neutropenia → Candida, Aspergillus.

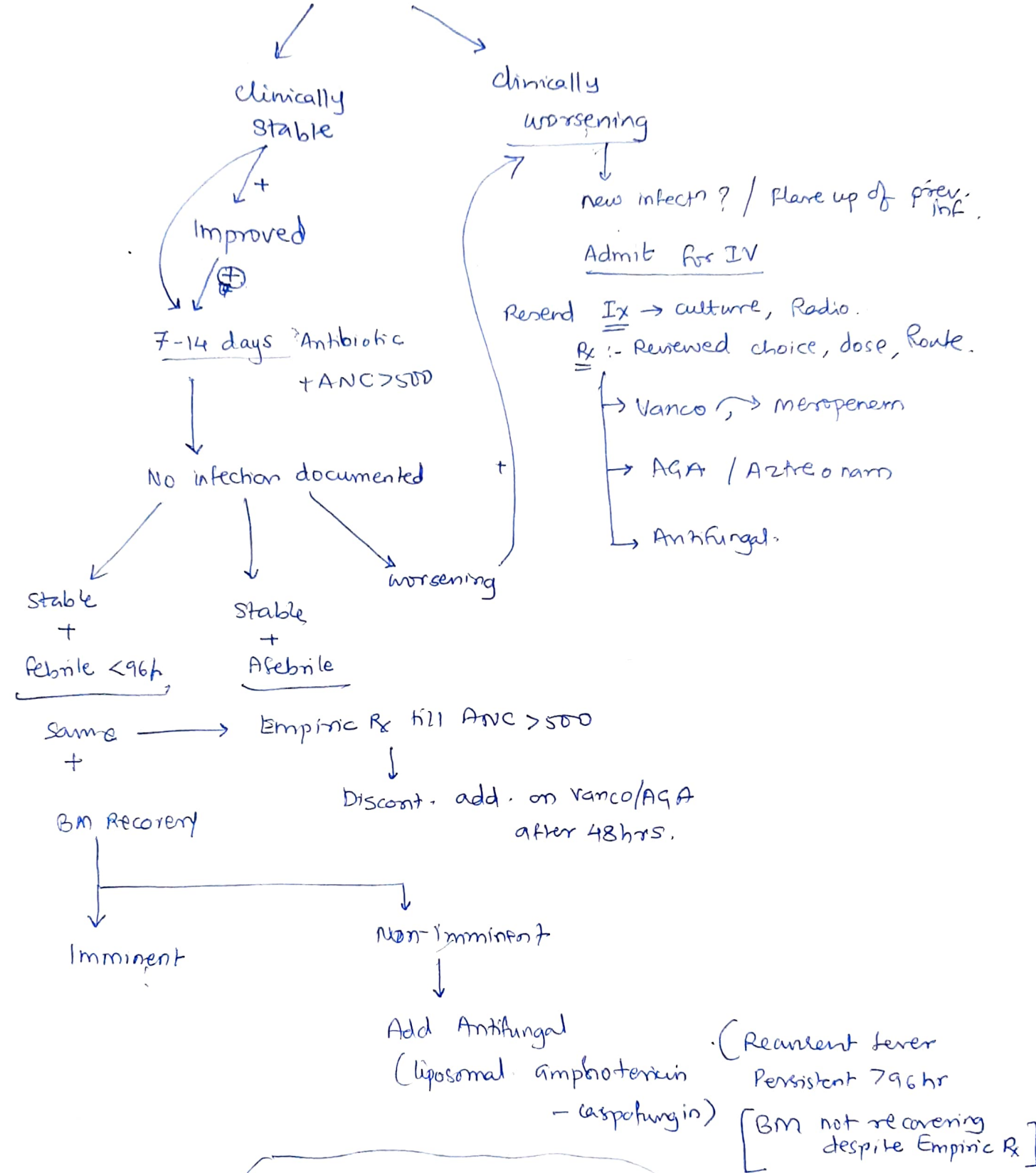
Treatment →



NOT AS MONOTHERAPY



Decision of duration of therapy



• How long to give Antibiotic
 Till Blood C/S -ve : 48hr.
 Afebrile ≥ 24hrs
 ANC : >500 + increasing