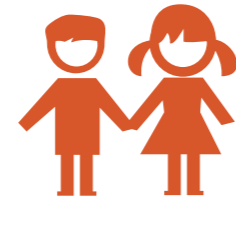


# NOMA

# SYSTEMATIC ORAL SCREENING OF ALL HOSPITALIZED CHILDREN

? Noma is an acute gangrenous infection mainly affecting the mouth and face. It has the potential to cause massive tissue destruction.



Noma occurs primarily in malnourished or immunosuppressed children with poor oral hygiene.



Left untreated, noma has a mortality rate of up to 90%.



In the absence of adequate treatment in the acute phase, complex plastic surgery will be necessary to reconstruct the face.

## FAMILIARIZE YOURSELF WITH STAGES AND MANAGEMENT OF NOMA!!

STAGE 0

### IF YOU SEE SIMPLE GINGIVITIS



- Edema and swollen gingival margins (with red edge)
- Pain +/- bleeding when touching and when brushing teeth
- Bad breath
- Hyper-salivation
- Anorexia

### MANAGEMENT

- Rinse the mouth with warm salt water 4-6 times per day
- Continued dental hygiene (regular brushing, careful scaling and local application of chlorhexidine 0.2%)
- Follow-up (pay careful attention to the speed at which the disease develops)
- Multivitamins; Zinc; Vitamin A; Renutrition
- Do not use methylene blue or gentian violet
- Increase parental awareness, and follow up on the child if problems persist more than 8 days

STAGE 1

### IF YOU SEE HEMORRHAGIC OR NECROTIZING GINGIVITIS/STOMATITIS



- Significant inflammation (redness and pain)
- Gingival edema
- Spontaneous gingival bleeding
- Mucosal ulceration and/or gingival necrosis diffused or localized to one or several teeth
- Bad breath
- Hyper-salivation
- Anorexia, fever

### MANAGEMENT

- Analgesics and scaling + antiseptic mouthwash (chlorhexidine 0.2%) 4-6 times per day
- Co-Amoxiclav (or amoxicillin) + Metronidazole PO x 14 days (if accompanied by malnutrition)
- Multi vitamins; zinc; vitamin A and Renutrition – Associated Care (other diseases)
- Monitor closely for 24 hours (pay careful attention to the speed at which the disease develops)

STAGE 2

### IF YOU SEE SWELLING – EDEMA (EARLY ACUTE)



- Same symptoms as the ones described in stage 1
- Facial edema
- Bad breath
- Pain, anorexia, fever

Warning: Not to be confused with an abscess

### MANAGEMENT

- Co-Amoxiclav (or Amoxicillin) + Metronidazole +/- Gentamicin IV x 14 days
- Multi vitamins; Zinc; Vitamin A and Renutrition – Major Analgesics and antiseptic Mouthwash (chlorhexidine 0.2%) 4-6 times per day
- Associated care (other pathologies, especially infection, dehydration and shock)
- Monitoring vital signs in intensive care (life threatening)
- Treat the wound but DO NOT perform surgery on the tissue

STAGE 3

### IF YOU SEE NECROSIS +/- TISSUE LOSS (LATE ACUTE)



- Sometimes persistence of symptoms described in stage 2 ACCOMPANIED BY
- Sore / gangrene (layer of necrotic tissue) indicating the future extent of tissue loss
- Sometimes bone sequestra
- Fetid odor
- Pain, anorexia, fever

### MANAGEMENT

- Co-Amoxiclav (or Amoxicillin) + Metronidazole +/- Gentamicin IV x 14 days
- Multi vitamins; Zinc; Vitamin A and Renutrition – Major analgesics and antiseptic Mouthwash (chlorhexidine 0.2%) 4-6 times per day
- Associated care (other pathologies, especially infection, dehydration and shock)
- Monitoring vital signs in intensive care (life threatening)
- Treat the wound but DO NOT perform surgery on the tissue

STAGE 4

### IF YOU SEE TISSUE/BONE LOSS AND WOUND HEALING PROCESS



- Loss of tissue / bone loss with presence of granulation tissue
- Significant malposition of teeth (not present before illness)
- Sometimes inability to open the mouth
- Wound healing process

### MANAGEMENT

- Hygiene and oral care + Renutrition if necessary
- As soon as possible, contact an NGO experienced in reconstruction for specialized surgical advice, immediate action (removal of bone sequestra, loose teeth ...), lesion and functional assessment
- Prevent avoidable complications: Intensive physiotherapy to avoid permanent mouth closure and scar retraction. Protect eye if eyelid is missing
- No emergency surgery except cleaning/removal of sequestra and assessment of lesions
- Minimum period of 1 year after the acute phase before considering surgical reconstruction
- Psychosocial support

STAGE 5

### IF YOU SEE SEQUELA LESION



- Loss of tissue / bone loss
- Significant malposition of teeth (not present before illness)
- Sometimes inability to open the mouth
- No evolution since at least one year after the acute phase

### MANAGEMENT

- Contact an NGO experienced in reconstruction for specialized surgical advice
- No urgency to consider reconstructive surgery
- Assessment of physiotherapy needs
- Nutritional and Psychosocial support

FOR ALL STAGES, PROPOSE SYSTEMATIC COUNSELING AND HIV TESTING.

www.nonoma.org