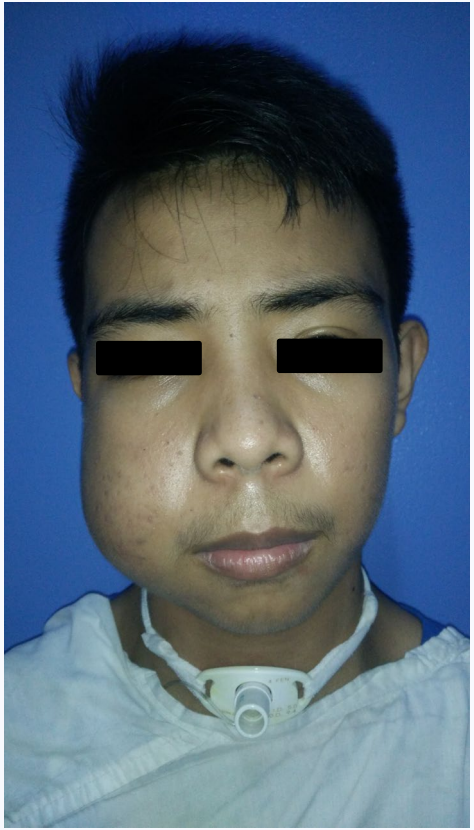
Honor · Service · Excellence

General Data

- MA, 16/M
- Right – handed
- Quezon Province
- 1st of 2 children
- Roman Catholic
- Grade 10



Chief complaint

“Dumudugo ang ngipin”

History of Present Illness

6 years prior to consult (2011) (+) episode of gum bleeding noted just as the patient was about to sleep, around the area of the right mandibular third molar, ~ 400 cc. Chewed ice chips, applied gauze, gargled, but bleeding persisted.

Patient and mother consulted at Medicare in Quezon, allegedly given Tranexamic acid which stopped the bleeding, then sent home.

History of Present Illness

Noted recurrence of bleeding over the next few days. Consulted at a local hospital. Assessed to have Hemophilia. Admitted for two weeks, transfused with 2 units packed RBC, FFP. Sent home. Sent to another hospital for tooth extraction.

Admitted at a hospital in San Pablo for one month. Given Factor IX, tooth extraction done of right mandibular first molar, sent home. Noted profuse bleeding from area but no blood transfusion occurred. Sent home on Tranexamic acid capsule.

History of Present Illness

5 years prior to consult (2013) : Noted growth of mass, around the angle of the right mandible. No consult done. No episodes of bleeding reported.

4 years prior to consult (2014): increase in the size of the mass. Consult at a local hospital. CT scan done. Allegedly with lytic lesions noted at the angle of the mandible (”butas – butas ”) Advised surgery but did not pursue.

History of Present Illness

2 years prior to consult: (+) recurrence of bleeding from same area, consulted at a local health center but transferred to tertiary hospital. Initial assessment was Hemophilia. Worked up for Hemophilia and von Willebrand disease, but diagnostics turned out negative.

Interim: Occasional episodes of bleeding.

- Sought consult at USTH for second opinion. Assessed to have odontogenic cyst, advised surgery. Biopsy was attempted but profuse bleeding noted, no histopathologic samples taken.

- Admitted at same institution for 2 1/2 months. (June – August 2016): CT Angiography revealed AV malformation.

History of Present Illness

Underwent emergency tracheostomy last July 2016 because of profuse bleeding and impending respiratory failure.

Advised embolization and surgical excision but was not pursued by the patient due to financial constraints

History of Present Illness

Patient was sent home last August 2016. Patient lost to follow – up.

Interim: No episodes of bleeding.

History of Present Illness

Few days prior (January 11, 2018), consulted at ER for recurrence of bleeding and occasional episodes of fever.
Received with stable vital signs, (-) pallor, (-) ongoing bleeding.
Noted gauze pack at area of right molar, with purulent discharge. Patient already had the pack in place for seven days.

History of Present Illness

Patient subsequently admitted for work – up and management.

Review of Systems

Patient subsequently admitted for work – up and management.

Past Medical History

(+) ATS allergy
(-) food allergy
(-) bronchial asthma
(-) hypertension
(-) PTB
(-) DM

Family Medical History

(+) Hypertension – maternal grandmother, aunt, mother
(-) DM
(-) PTB
(-) cancer
(-) goiter
(-) similar illness

Personal/Social History

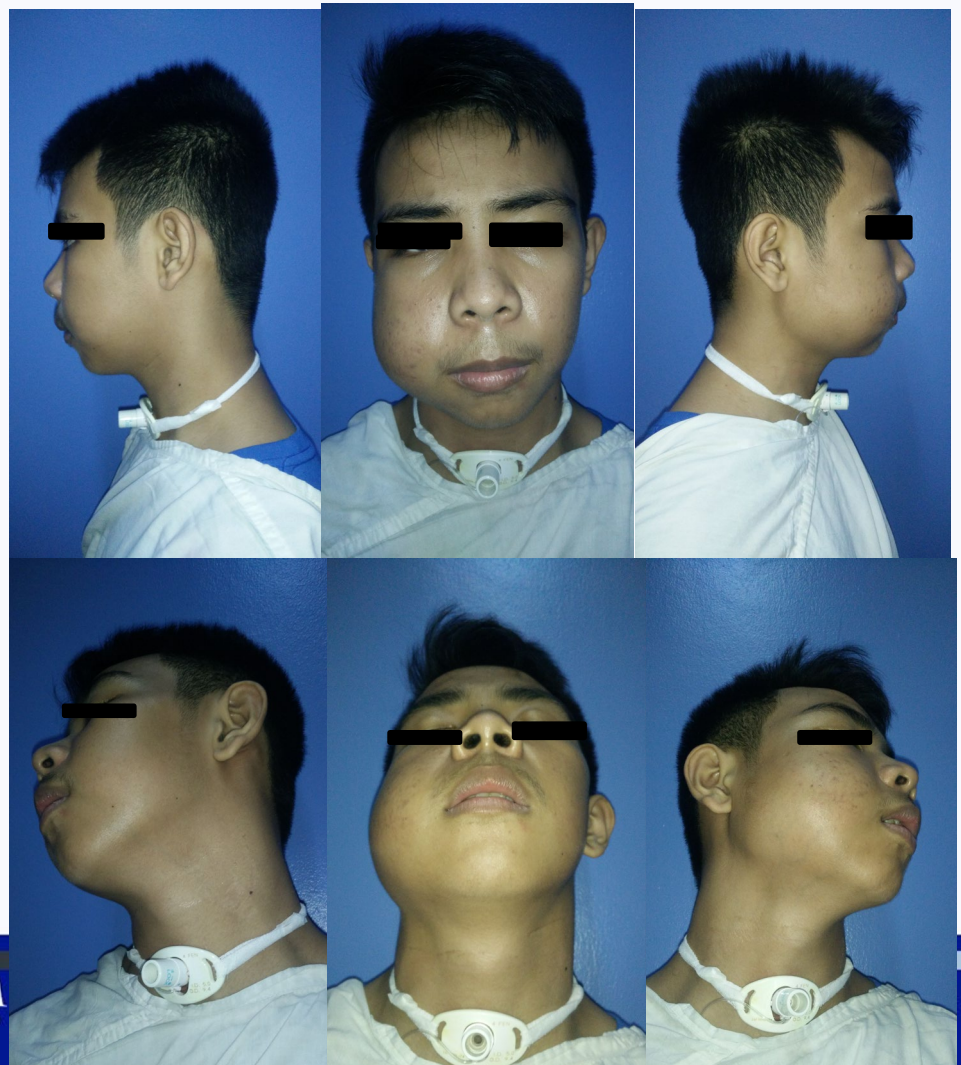
Previously in grade 10
Non – smoker
Non – alcoholic
Episodes of depressed mood when patient was in grade 8
(+) previous episode of suicidal ideation

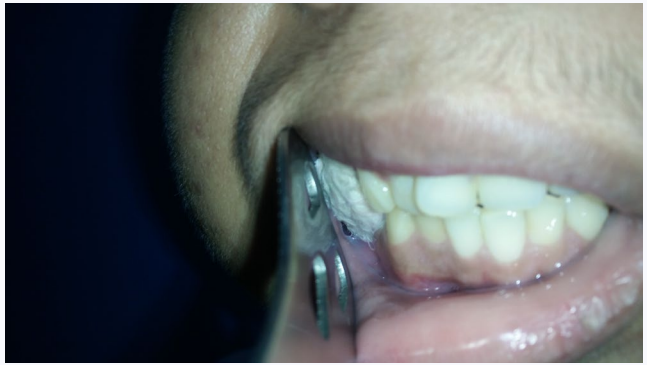
Physical Exam

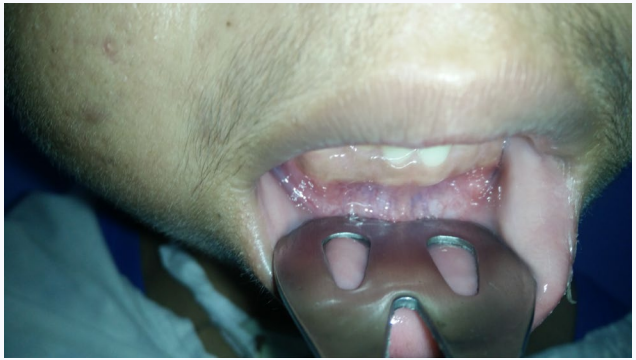
Awake, alert, not in cardiorespiratory distress

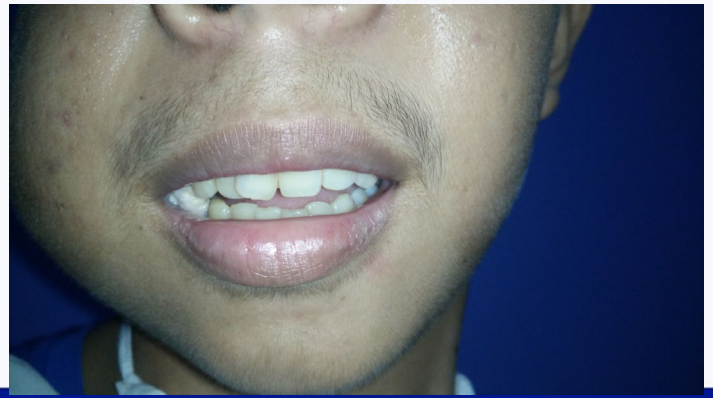
BP: 100/70
HR: 86
RR: 20
T: 36.4

Systemic physical exam is noncontributory.
Otoscopy, anterior rhinoscopy,
flexible nasopharyngolaryngoscopy are non – contributory









- **ASSESSMENT:**
  Arteriovenous malformation, right mandible

Differential Diagnoses:

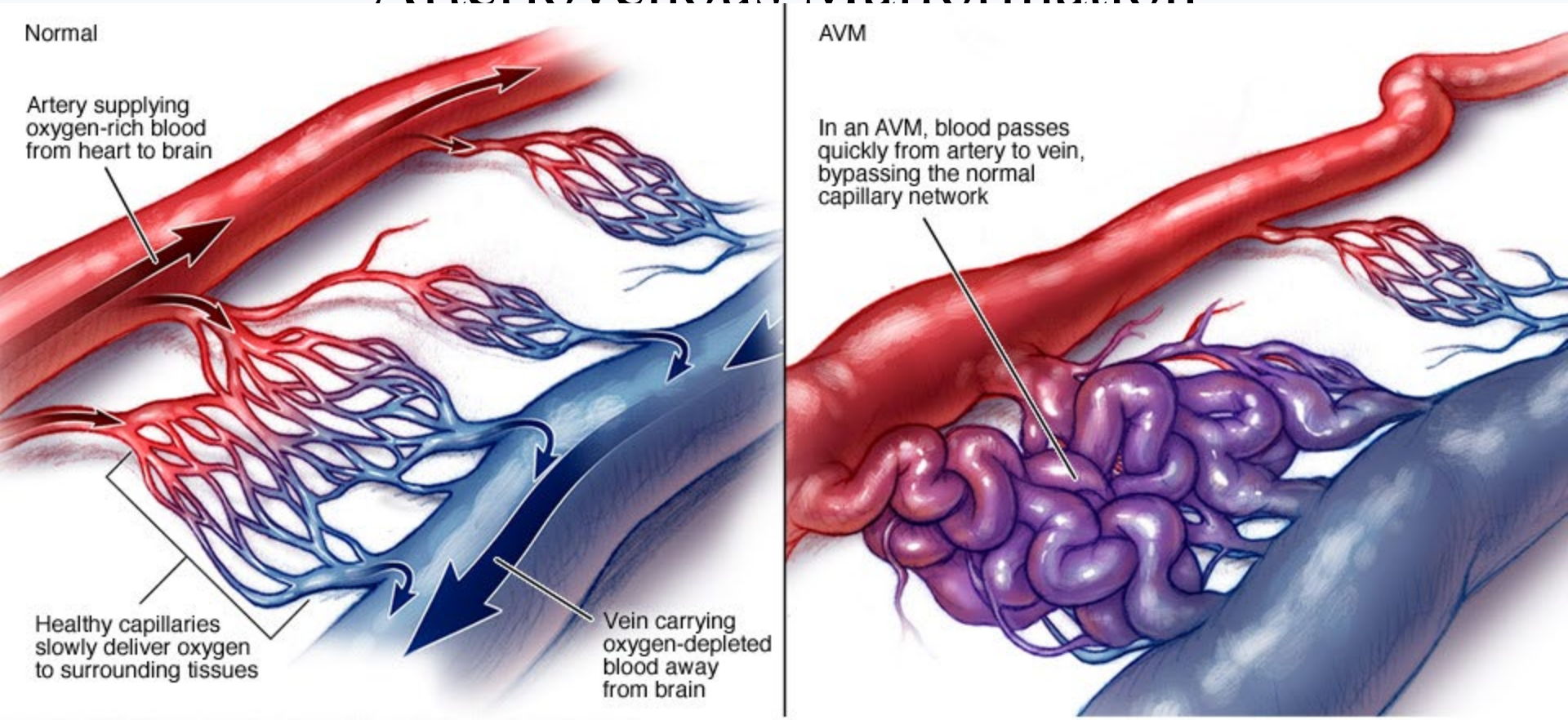
- Aneurysmal Bone Cyst
- Ameloblastoma

DISCUSSION

Arteriovenous Malformation

- Congenital; tangle of arteries and veins connected by one or more fistulae
- More common in young adults
- Clinically silent until catastrophic event occurs

Arteriovenous Malformation



Arteriovenous Malformation

- May occur anywhere in the body
- Headaches in as many as half of all patients with AVM

Arteriovenous Malformation

- Diagnosis: CT or MRI
- Management: invasive modalities – embolization, surgical resection, focal beam radiation

Arteriovenous Malformation of the Mandible

- Rare but potentially life – threatening
- Frequently high flow malformations
- minor gingival bleeding, malocclusion, hemorrhagic shock following extraction of teeth

Arteriovenous Malformation of the Mandible

among the most serious of the vascular malformations

Multiple imaging modalities should be used to evaluate characteristics of AVMs

bone erosions, sclerotic changes, periosteal reactions or a cyst-like radiolucent lesion; sunburst effect

Thank you!

Diagnostics
Assessment
DDX

- BLEEDING and MANDIBULAR MSSES/BLEEDING in pediatric patient/blood dyscrasias

- How to diff bet high flow low flow: look for article na nagdidiff

Discussion
(on high flow)

- End point of ddx is clinical dx is vascular tumor.
- Then one slide on low flow high flow

- Discussion of AV Mal in the mandible