GRAND ROUNDS (October 11, 2019)

OTORHINOLARYNGOLOGY
1961
UPCM - PGH

DEPARTMENT OF OTORHINOLARYNGOLOGY
PHILIPPINE GENERAL HOSPITAL

VISION

The Department of Otorhinolaryngology shall be an internationally recognized center of excellence in the field of Otorhinolaryngology and Head and Neck Surgery

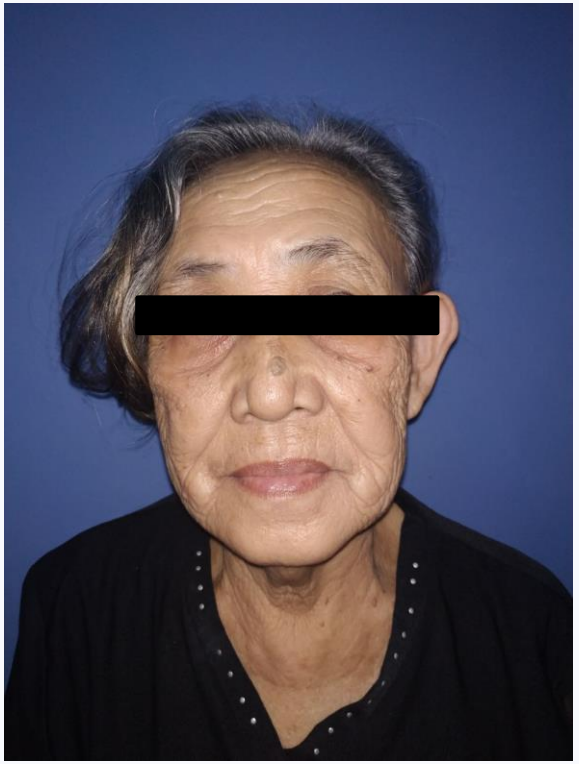
MISSION

The health needs of the Filipino shall be its prime consideration.

It shall provide excellence and leadership in the different aspects in Otolaryngology – Head and Neck Surgery by teaching, providing exemplary clinical practice and dynamically pursuing relevant researches beneficial to the community in an environment guided by moral, ethical and spiritual values.

General Information

- LP
- 76/F
- Married
- 7th day Adventist
- Barangay San Juan, Quezon



Chief Complaint

Left postauricular mass

History of Present Illness

6 months PTC (April, 2019)

- Patient noted the presence of a hyperpigmented flat lesion on the back of her left ear. The lesion measured about 1x1cm at that time
- No pain, bleeding and other associated symptoms were noted

History of Present Illness

In the interim,

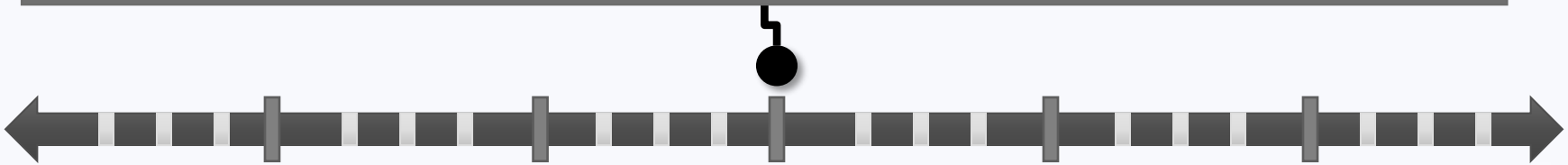
- Patient noticed that the lesion gradually grew in size and became elevated and nodular
- No associated symptoms
- Patient would boil malunggay leaves and place it on the lesion without decrease in size of lesion

History of Present Illness

2 months PTC (August, 2019)

Patient decided to seek consult at PGH OPD

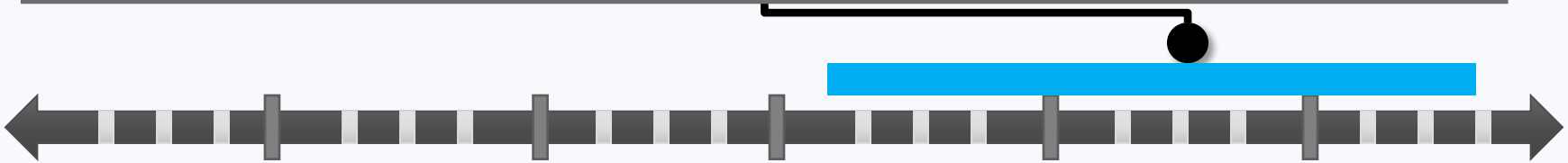
- An wedge biopsy was done which revealed basal cell carcinoma, nodular type



History of Present Illness

Interim

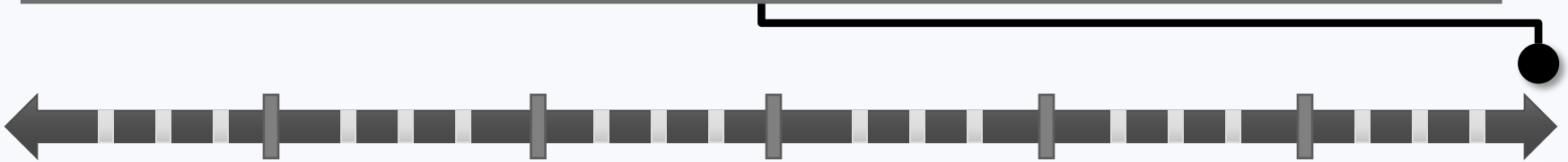
- Patient has been following up at the PGH ORL OPD
- Gradual increase in the size of the mass was noted
- Occasional bleeding noted when patient cleans the lesion with hydrogen peroxide



History of Present Illness

Currently

- Patient is admitted at PGH and is desirous of surgery



Past Medical History

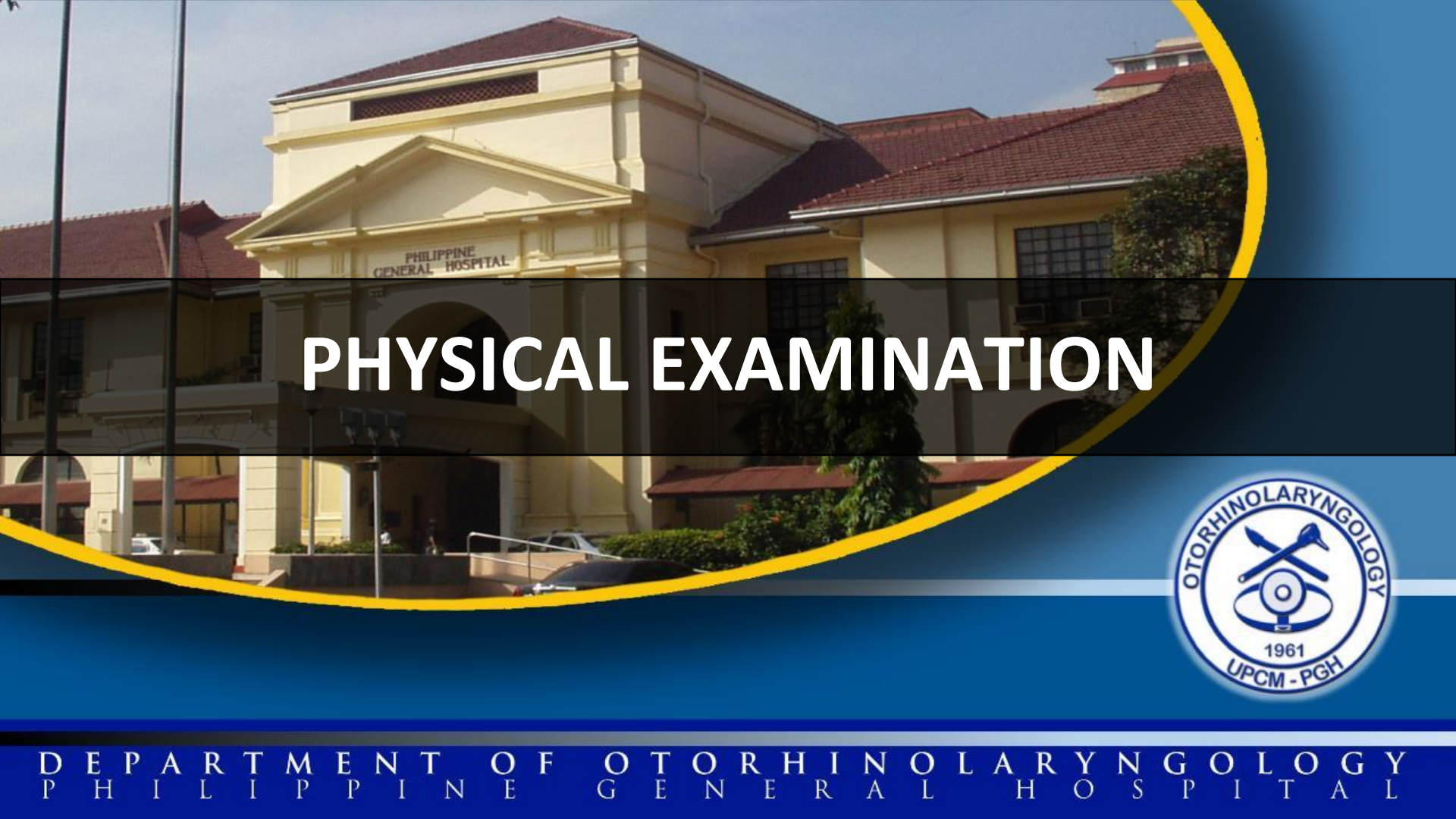
- No hypertension, diabetes, bronchial asthma,
- No food or medicine allergies
- No previous hospitalizations or surgeries

Family History

- No hypertension, diabetes, tuberculosis
- No cancer
- No history of similar disease

Personal and Social History

- Non-smoker
- Non-alcoholic beverage drinker
- No illicit-drug use
- (+) prolonged sun exposure due to gardening



PHYSICAL EXAMINATION

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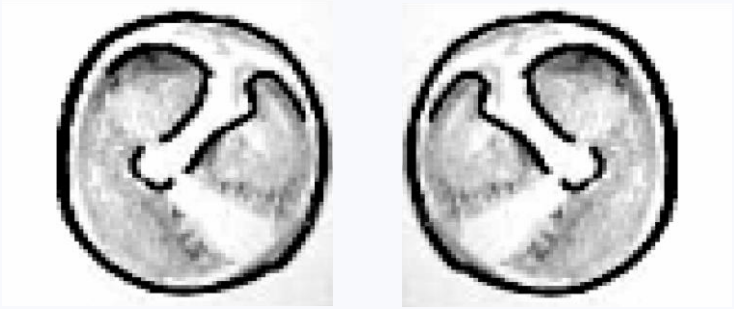
SYSTEMIC PHYSICAL EXAM

General	Awake, alert, cooperative, not in cardiorespiratory distress
Vital signs	BP 120/70, HR 76, T 36.8, RR 18, O2 99% Height: 149cm Weight: 49kg
Lungs	Equal chest expansion, clear breath sounds
Chest	Adynamic precordium
GI	Soft flat abdomen, normoactive bowel sounds, no masses and no tenderness upon palpation
Extremities	Full equal pulses, pink nail beds, capillary refill time less than 2 seconds
Neurologic	(-) cranial nerve, motor, and sensory deficits, normal reflexes

OTOLOGIC EXAM



No gross deformities on inspection
Patent External auditory canal, bilateral
Intact tympanic membrane with cone of light, bilateral
No discharge or bleeding

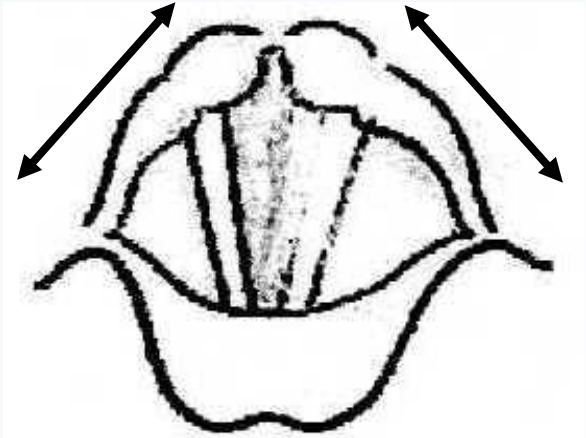
ANTERIOR RHINOSCOPY EXAM

- Septum midline
- Non-congested turbinates
- No masses seen
- No discharge / bleeding

ORAL CAVITY EXAM

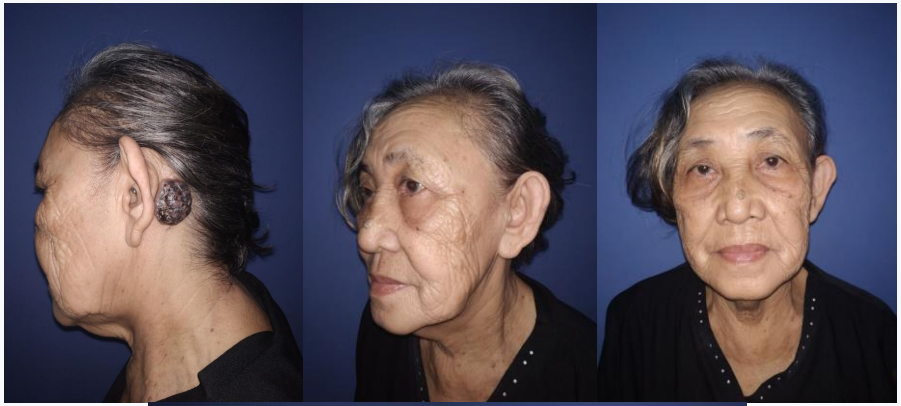
- Patient is completely edentulous
- Uvula and tongue were midline
- No lesions were noted intraorally

LARYNGOSCOPY



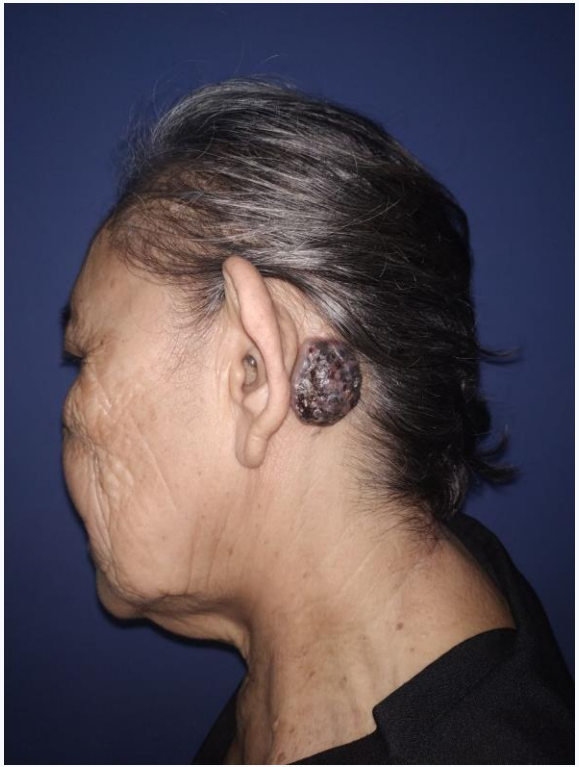
- Fully mobile vocal cords
- No masses noted

HEAD & NECK EXAMINATION



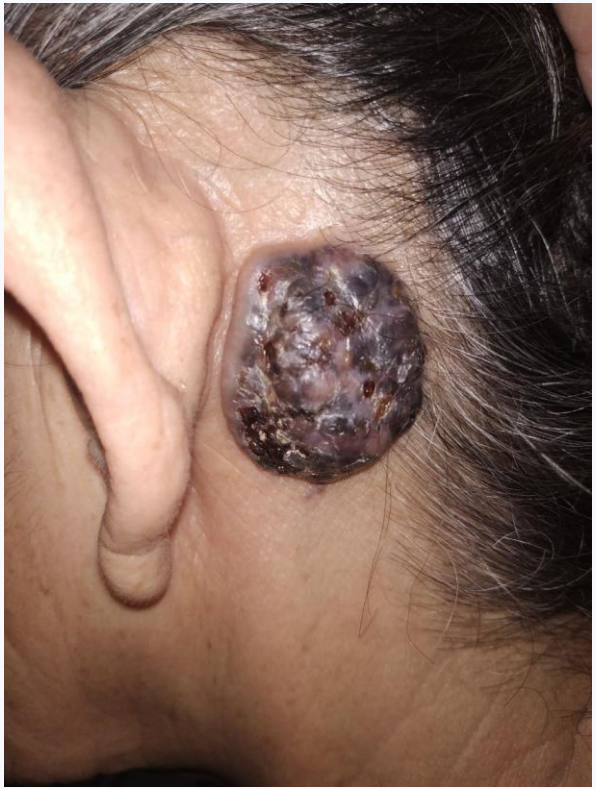
- Fitzpatrick skin type V
- Glogau type IV

HEAD & NECK EXAMINATION



- (+) 4 x 2.5cm hyperpigmented, nodular mass on left postauricular area (+) crusting
- (-) discharge or bleeding from the lesion
- (+) CLAD firm movable on level V ~1x1

HEAD & NECK EXAMINATION



- (+) telangiectasia
- Pearly border
- Distance from periphery of lesion to posterior auricular sulcus – 0.5cm
- Lesion is hairline involving

CASE SUMMARY

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- 76/F
- 6 month history of a gradually enlarging hyperpigmented, nodular mass on the left postauricular area with occasional bleeding on manipulation

PRIMARY WORKING IMPRESSION

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- Basal cell carcinoma, nodular type stage III T2N1M0

Differential Diagnosis

Melanoma
Squamous Cell Carcinoma
Dermal Nevi

Differential Diagnosis

	Rule-in	Rule-out
Melanoma	• Pigmented lesion with asymmetric configuration, irregular boarders and nonuniform color	(+) Metastasis
Squamous Cell Carcinoma	• Larger lesions with central ulceration can appear cup-shaped, these can resemble squamous cell carcinoma	(+) Metastasis
Dermal Nevi	● Circumscribed, chronic lesion ● Found usually on sun exposed areas	● Not invasive and locally destructive ● even pigmentation and smooth borders

DIAGNOSTICS

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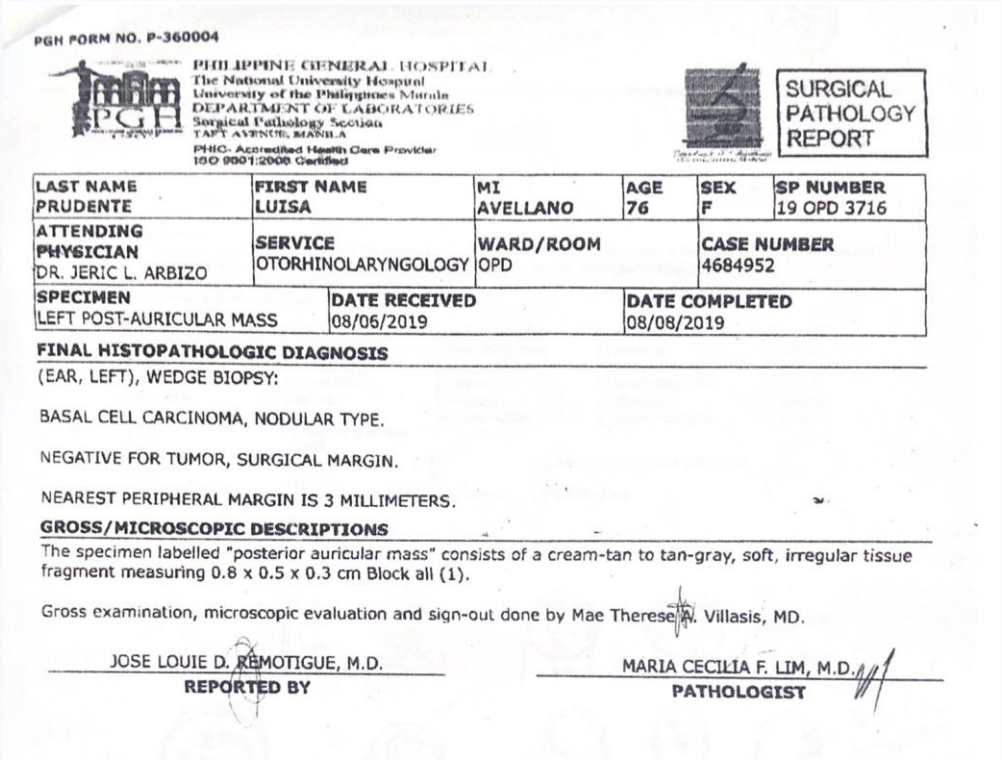
DIAGNOSTICS

TEST	RATIONALE
Biopsy	To determine histopathology
CT Scan (Head & Neck)	To determine extent of involvement

Diagnostics



PGH FORM NO. P-360004

PHILIPPINE GENERAL HOSPITAL
The National University Hospital
University of the Philippines Manila
DEPARTMENT OF LABORATORIES
Surgical Pathology Section
TAFT AVENUE, MANILA
PHIC- Accredited Health Care Provider
ISO 9001:2008 Certified

SURGICAL PATHOLOGY REPORT

LAST NAME	FIRST NAME	MI	AGE	SEX	SP NUMBER
PRUDENTE	LUISA	AVELLANO	76	F	19 OPD 3716

ATTENDING PHYSICIAN	SERVICE	WARD/ROOM	CASE NUMBER
DR. JERIC L. ARBIZO	OTORHINOLARYNGOLOGY	OPD	4684952

SPECIMEN	DATE RECEIVED	DATE COMPLETED
LEFT POST-AURICULAR MASS	08/06/2019	08/08/2019

FINAL HISTOPATHOLOGIC DIAGNOSIS

(EAR, LEFT), WEDGE BIOPSY:

BASAL CELL CARCINOMA, NODULAR TYPE.

NEGATIVE FOR TUMOR, SURGICAL MARGIN.

NEAREST PERIPHERAL MARGIN IS 3 MILLIMETERS.

GROSS/MICROSCOPIC DESCRIPTIONS

The specimen labelled "posterior auricular mass" consists of a cream-tan to tan-gray, soft, irregular tissue fragment measuring 0.8 x 0.5 x 0.3 cm Block all (1).

Gross examination, microscopic evaluation and sign-out done by Mae Therese W. Villasis, MD.

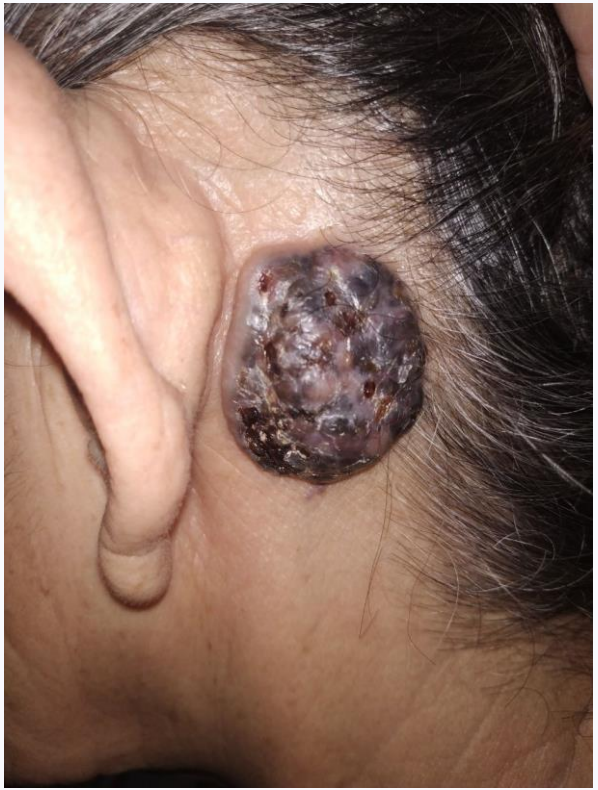
JOSE LOUIE D. REMOTIGUE, M.D.
REPORTED BY

MARIA CECILIA F. LIM, M.D.
PATHOLOGIST

DISCUSSION

Basal Cell Carcinoma

- **Slow growing epithelial malignancy from the basal layer of the epidermis and its appendages**
- Rarely metastasizes
- Invasive and locally destructive
- Mutations in TP53 and other cell cycle control genes



Statistics on Basal Cell Carcinoma

- Basal cell carcinoma (BCC) is the most common skin malignancy with estimated annual incidences of 1 million, over 500,000 and 190,000 in the USA, Europe and Australia, respectively .
- More than 60% of all skin cancers in the Philippines are basal cell carcinoma

Sanquian, F.Y.. (2006). Basal Cell Carcinoma of the Lip and Mentum. *Philippine Journal Of Otolaryngology-Head And Neck Surgery*

Clinical Presentation

Nodular

- 80% of cases
- Pearly or translucent quality, telangiectactic vessel is frequently seen within the papule
- Periphery is more raised than the middle
- Ulceration is frequent

Clinical Presentation

Superficial

- 15% of cases
- Most commonly occur on the trunk
- Scaly, non firm macules, patches or thin plaques
- Atrophic center, rimmed periphery with fine translucent papules

Clinical Presentation

Morpheaform/ Infiltrative

- 5-10% of cases
- Smooth, flesh colored light pink papules or plaques that are frequently atrophic
- Firm or indurated with ill deformed borders

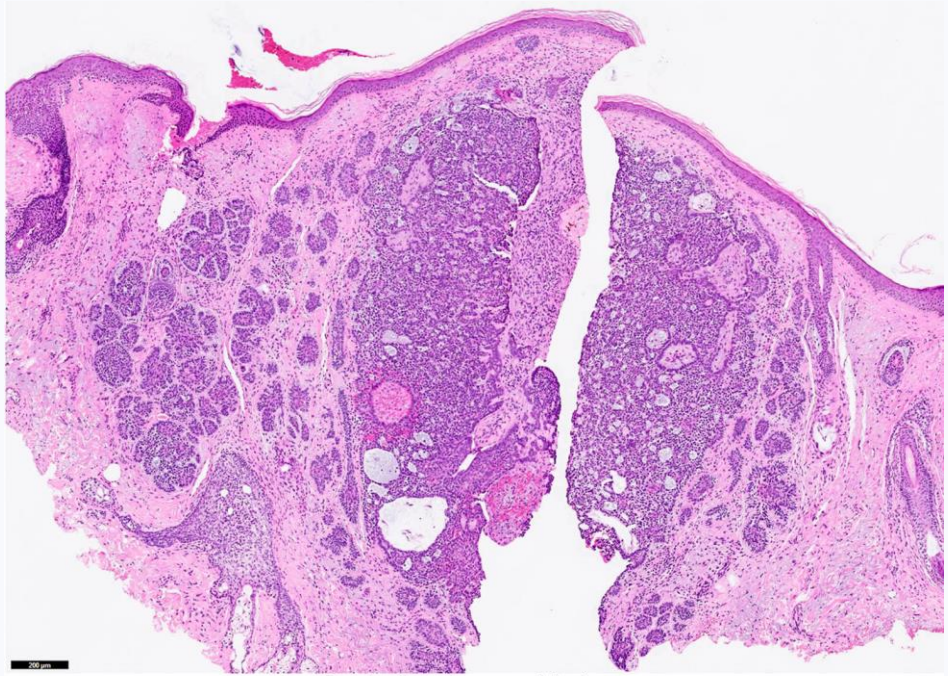
Risk Factors

- **Ultraviolet exposure**
  - Sun
  - Tanning beds
  - Phototherapy
  - Photosenthesitizing agent
- **Chronic arsenic exposure**
- **Ionizing radiation**
- **Phenotypic traits**

Pathology

Nodular

- Discrete nests of basaloid cells in the dermis.
- Peripheral palisading of the malignant keratinocytes and a mucinous-surrounding tumor stroma.
- A separation or "cleft," between the tumor and the dermis,

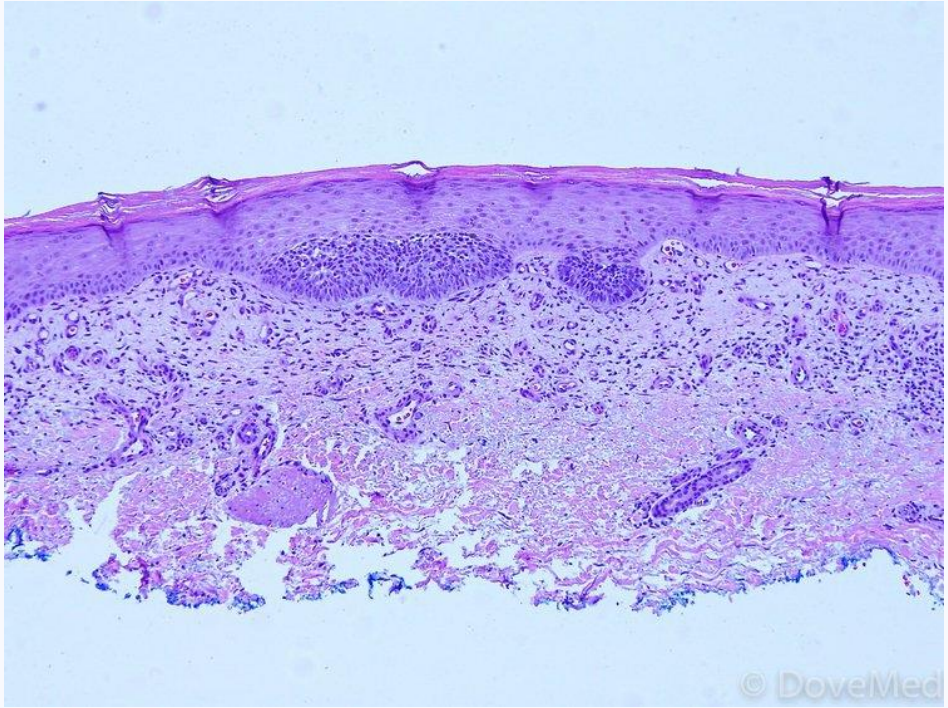


Basal cell carcinoma, nodular type:
large and small nests in derma (H&E, low power)

Pathology

Superficial

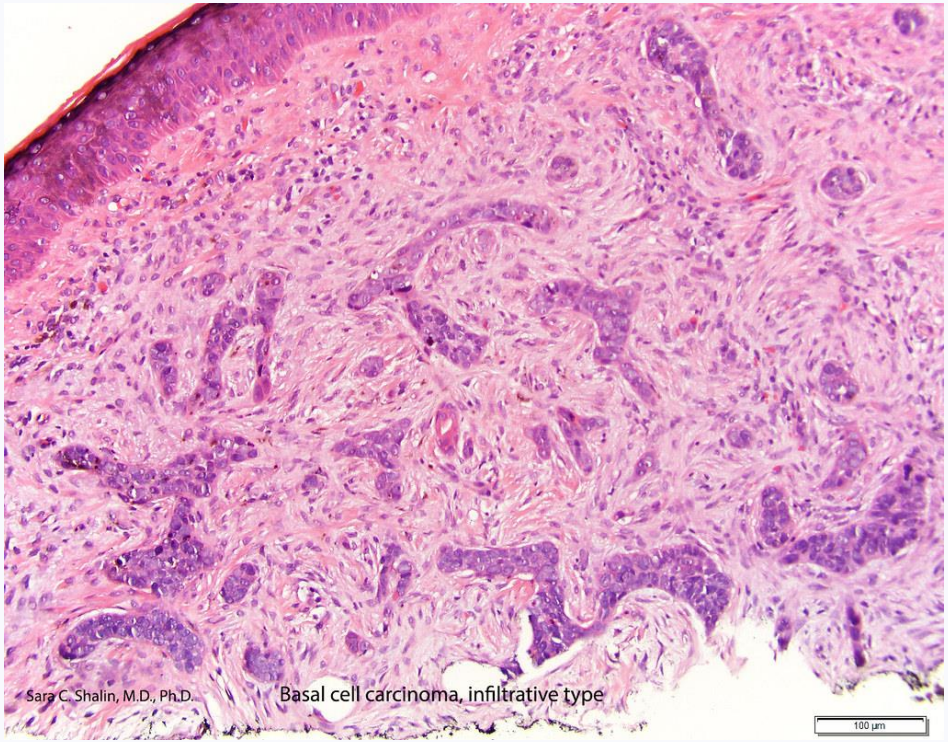
- Foci of malignant, basaloid, palisading tumors "budding" off the epidermis



Pathology

Infiltrative

- Thin cords of basaloid tumor cells penetrating the surrounding collagen, which may appear sclerotic.

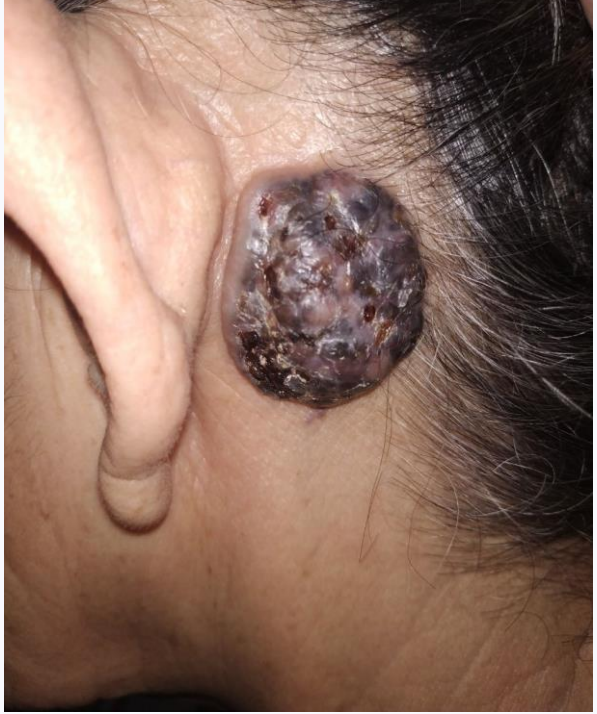


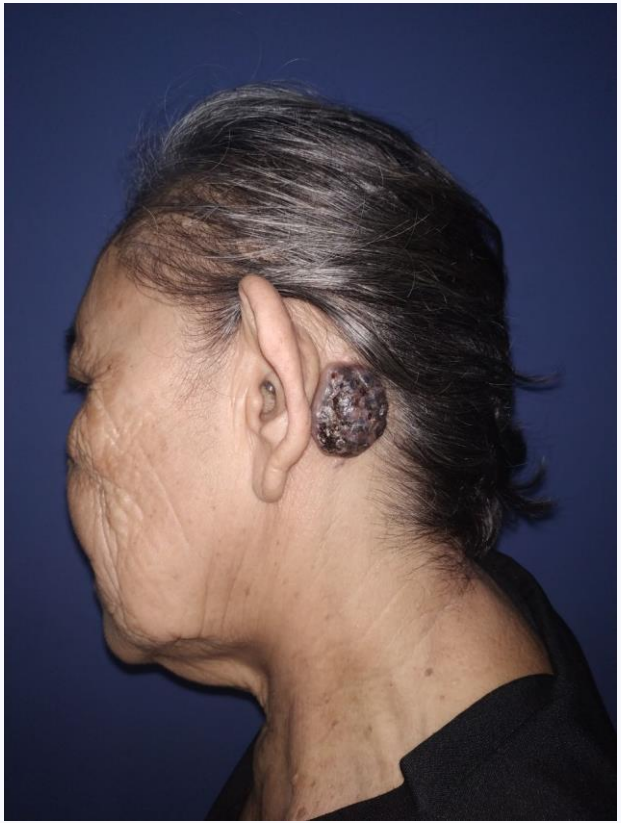
Patient Factors

- LP
- 76/F
- Good functional status (ECOG 1)

ECOG PERFORMANCE STATUS*

Grade	ECOG
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work
2	Ambulatory and capable of all selfcare but unable to carry out any work activities. Up and about more than 50% of waking hours
3	Capable of only limited selfcare, confined to bed or chair more than 50% of waking hours
4	Completely disabled. Cannot carry on any selfcare. Totally confined to bed or chair
5	Dead





Disease Factors

Primary tumor	Nodal Status	Metastasis
• Primary tumor ~3 cm at the postauricular area • No mastoid involvement	• Suspicious node at level V	• No clinical evidence of distant metastasis
T2	**N_1**	**cM_0**

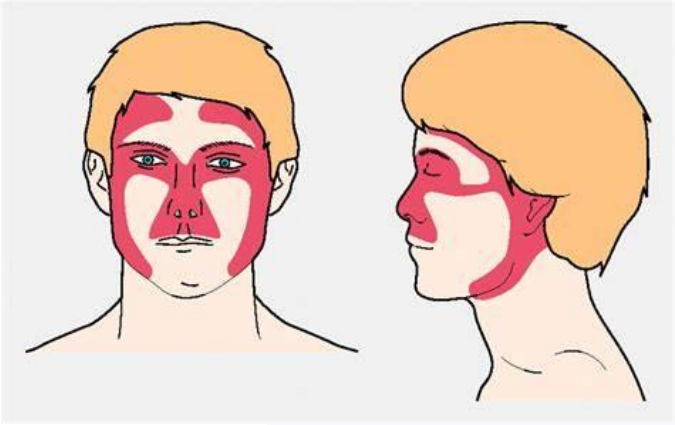
Treatment Goals:

- Intent of treatment: curative
- Treatment goals
  - Oncologic clearance
  - Mitigate recurrence
  - Acceptable cosmesis

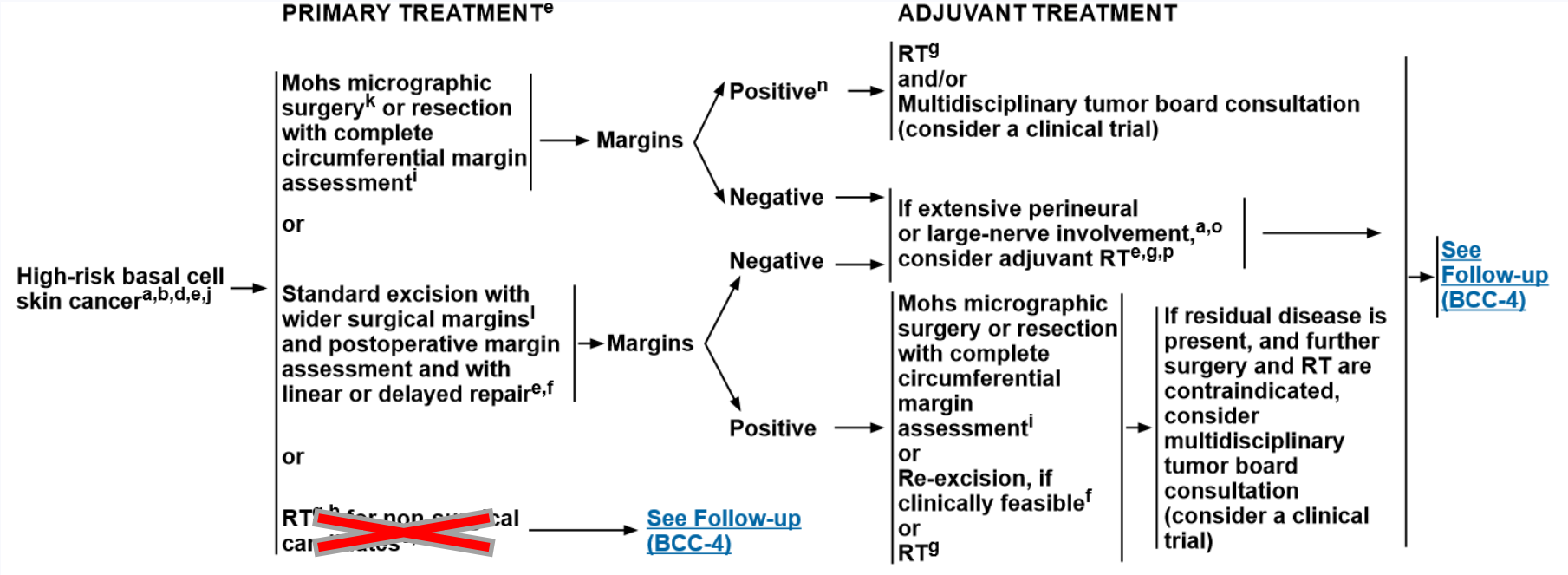
Treatment of primary tumor

RISK FACTORS FOR RECURRENCE

H&P	Low Risk	High Risk
Location/size	Area L <20 mm	Area L ≥20 mm
	Area M <10 mm[1]	Area M ≥10 mm
		Area H[3]
Borders	Well defined	Poorly defined
Primary vs. recurrent	Primary	Recurrent
Immunosuppression	(-)	(+)
Site of prior RT	(-)	(+)
Pathology[5]		
Subtype	Nodular, superficial[2]	Aggressive growth pattern[4]
Perineural involvement	(-)	(+)

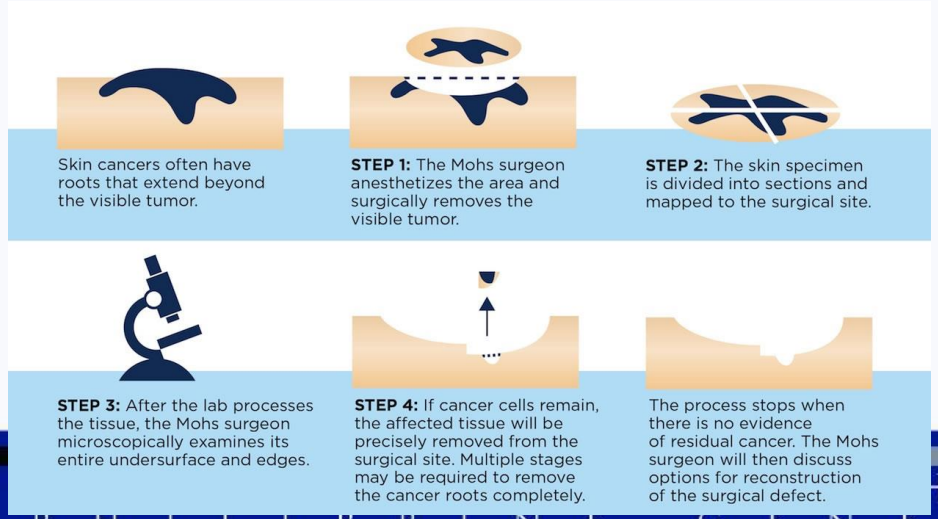


Area H = "mask areas" of face (central face, eyelids, eyebrows, periorbital, nose, lips [cutaneous and vermilion], chin, mandible, preauricular and postauricular skin/sulci, temple, ear), genitalia, hands, and feet.
Area M = cheeks, forehead, scalp, neck, and pretibia.
Area L = trunk and extremities (excluding hands, nail units, pretibia, ankles, feet).


PRIMARY TREATMENT[e]
ADJUVANT TREATMENT
High-risk basal cell skin cancer[a,b,d,e,j]
Mohs micrographic surgery[k] or resection with complete circumferential margin assessment[i]
Margins
Positive[n]
RT[g] and/or Multidisciplinary tumor board consultation (consider a clinical trial)
Negative
If extensive perineural or large-nerve involvement,[a,o] consider adjuvant RT[e,g,p]
or
Standard excision with wider surgical margins[l] and postoperative margin assessment and with linear or delayed repair[e,f]
Margins
Negative
Positive
Mohs micrographic surgery or resection with complete circumferential margin assessment[i] or Re-excision, if clinically feasible[f] or RT[g]
If residual disease is present, and further surgery and RT are contraindicated, consider multidisciplinary tumor board consultation (consider a clinical trial)
See Follow-up (BCC-4)
or
RT[g,h] for non-surgical candidates[m]
See Follow-up (BCC-4)

Treatment of primary tumor

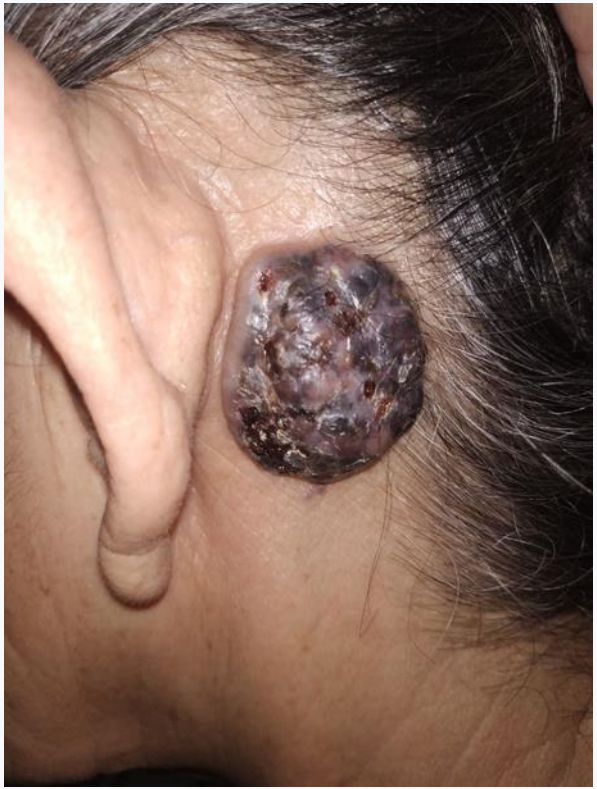
Mohs micrographic surgery	Standard surgical excision
Allows circumferential intraoperative assessment of 100% of margins	Pathologists will only report margin status from requested areas of the specimen on FS
More time-consuming	Can be performed relatively quicker



Treatment of primary tumor

[I]Due to the wide variability of clinical characteristics that may define a high-risk tumor, it is not feasible to recommend a defined margin for standard excision of high-risk BCC. Keen awareness of the subclinical extension of BCC is advised when selecting a treatment modality without complete margin assessment for a high-risk tumor. These margins may need to be modified based on tumor- or patient-specific factors.

- Standard 1.5-2 cm margins may be excessive
- A 1cm circumferential margin may be preferable to preserve as much auricular framework as possible and obviate the need for reconstruction
- More frozen section determinations on the anterior portion (including conchal cartilage involvement)



Treatment of the neck

- Metastasis (nodal and distant) is exceedingly rare (<0.1%)
- Theoretically, a positive node would entail neck dissection of LN levels II-V; which may lengthen OR time

- Sentinel node biopsy is rarely done for basal cell carcinomas and has only been described in case reports among high-risk lesions.

Harwood M et al. Metastatic basal cell carcinoma diagnosed by sentinel lymph node biopsy. J Amer Acad Derm 2005; 474-477.

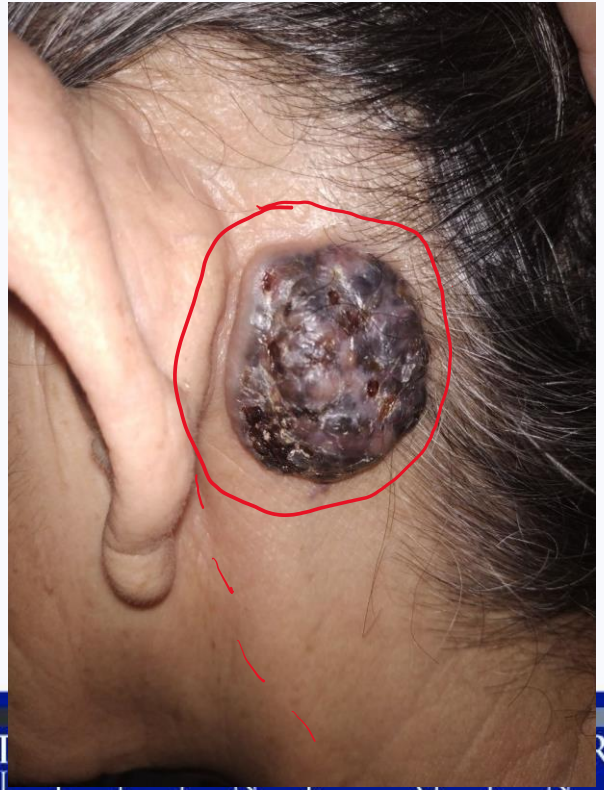
Treatment of the neck

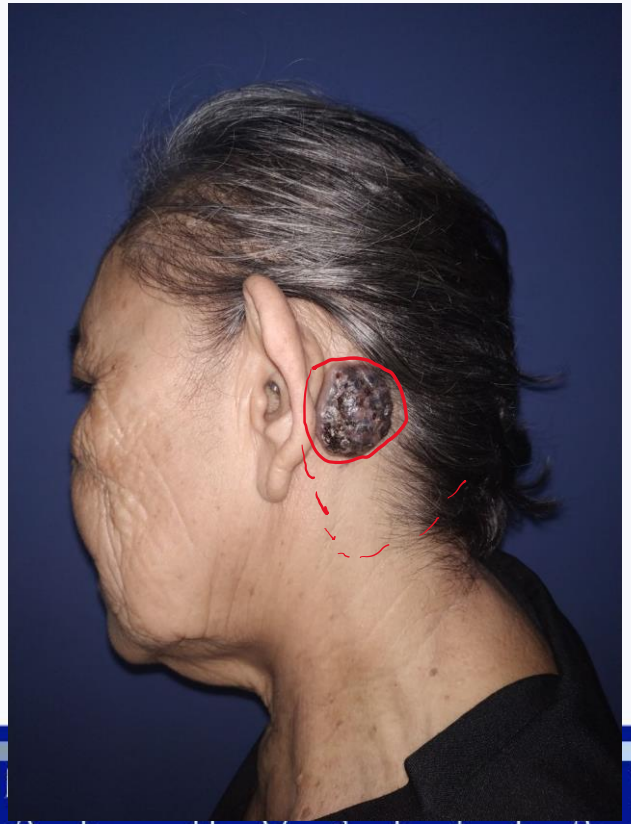
- Sonogram-guided fine needle biopsy of the node preoperatively

- Alternatively: Intraoperative frozen section

Reconstruction

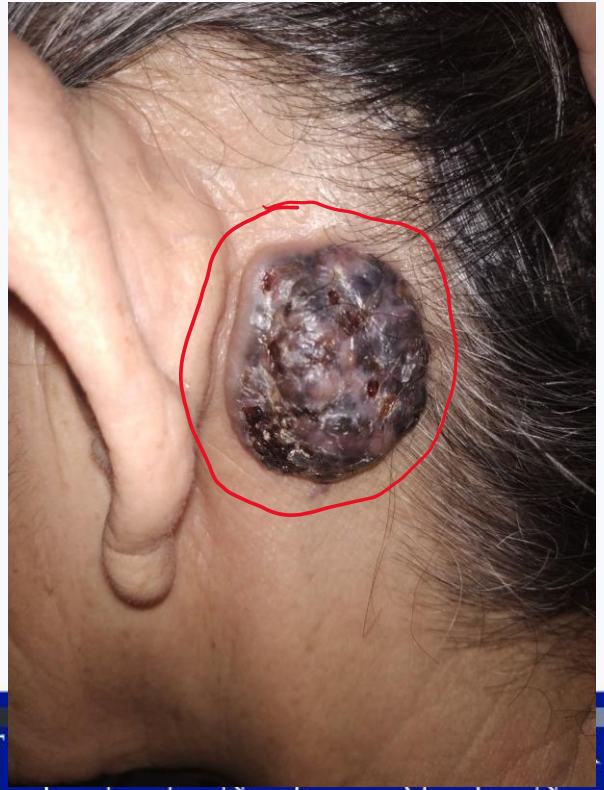
- Rotation-advancement flap

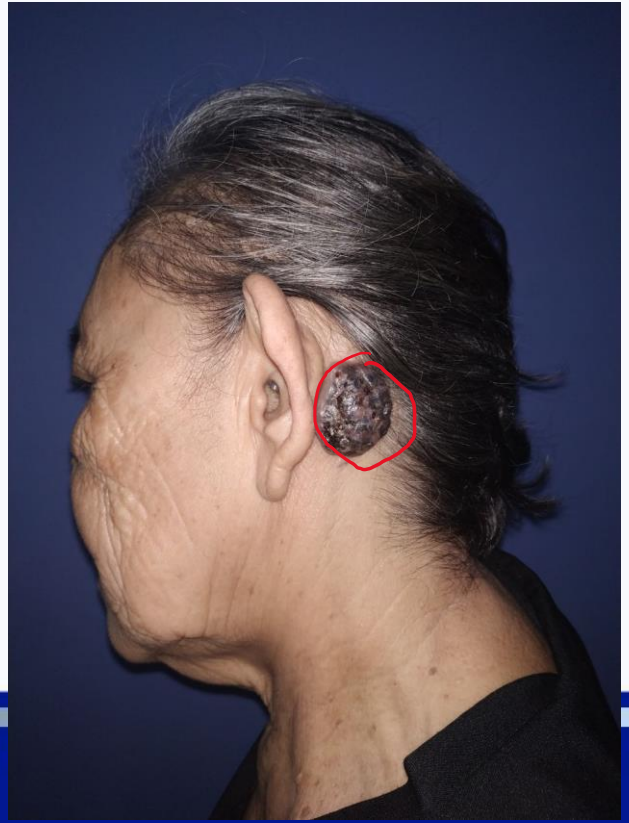




Reconstruction

- Split-thickness skin graft on temporalis muscle bed





Plan

- Preoperative sonogram-guided FNA of level V node
- Excision of tumor with 1 cm margins and intraoperative frozen section for margins
- Rotation-advancement flap reconstruction

Thank you!