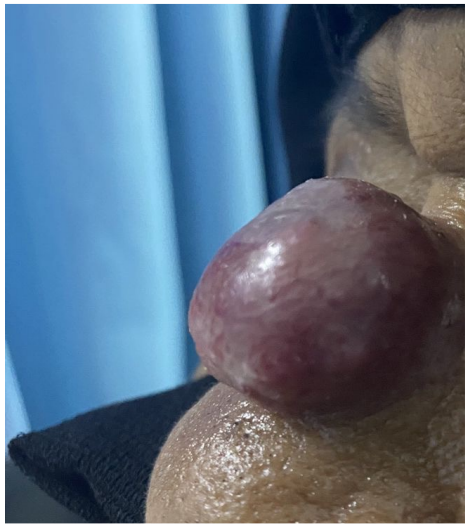
Nasal Dorsum Mass

case and review

Presented by Dr. Mohammed Alwabili PGY-5
supervised | Dr. Fareed alghamdi

11:36pm

ER doc: we have a 65 yo female, DM, HTN, c/o nasal dorsum mass since 11 months with MRI report “hemangioma”… please come and assess now!!

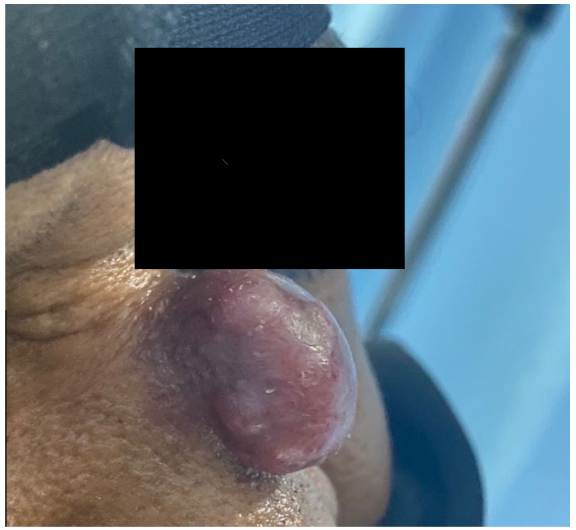


Hx

- Started as small pimple
- Progressive increase in size
- No aggreviating factors
- No reliveing factors or use of medications
- No associated symtoms
- No sun exposure
- No biopsy
- -ve FHx
- Non smoker or substance use.
- -ve surgical hx or trauma
- Unremarkable PHx

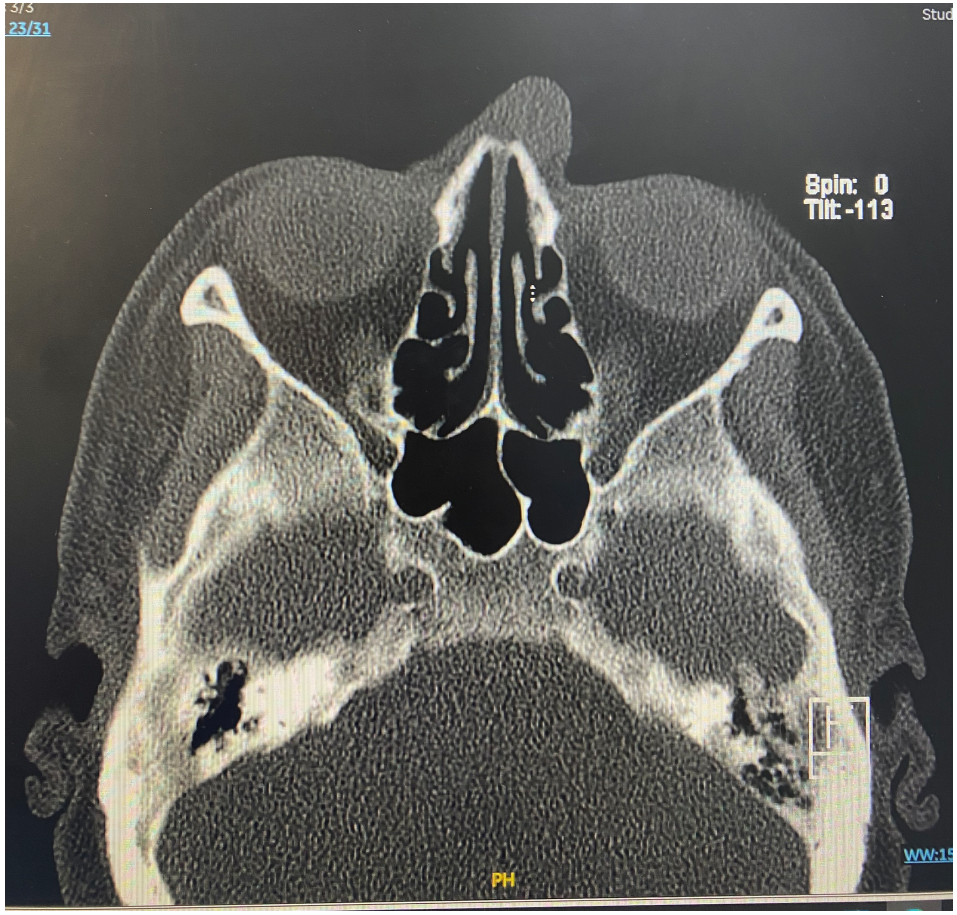
PE:

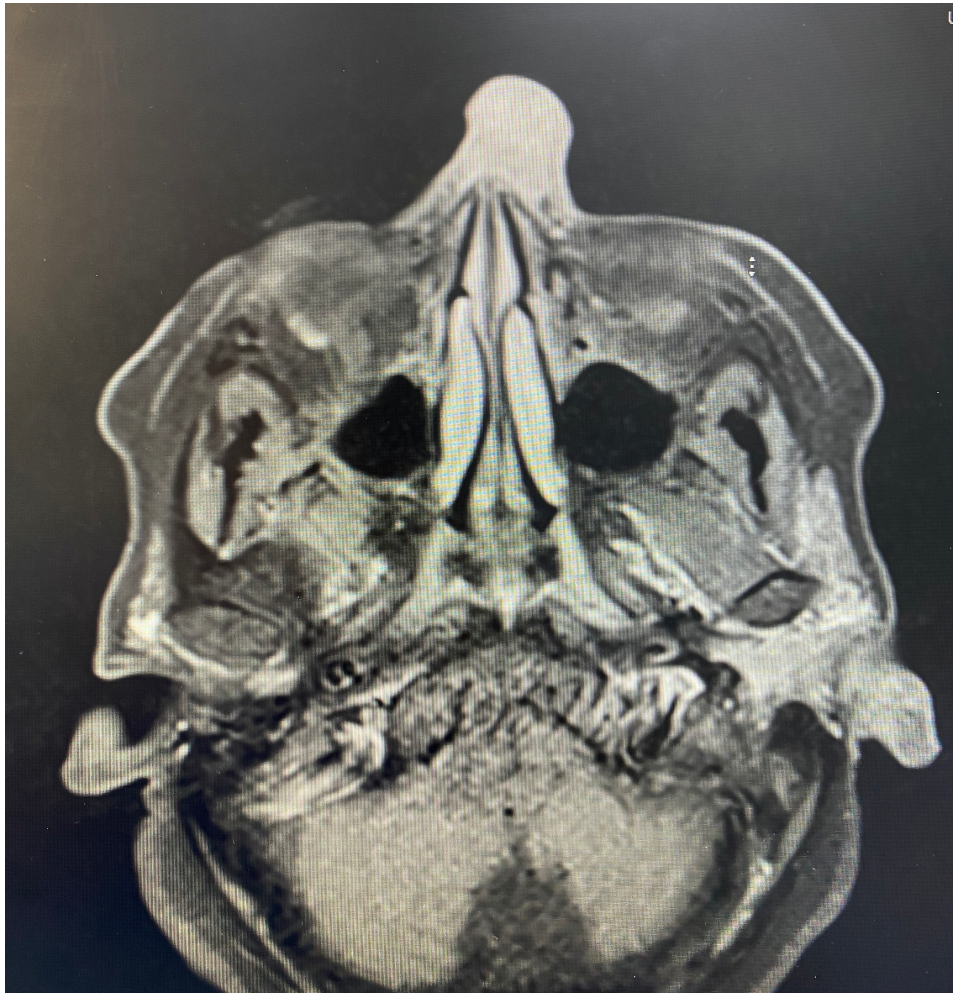
- Looks well
- 2*3 cm smooth rounded firm pedunculated mass over nasal dorsum, non tender, no hotness, or fluctations.
- There is pulsations
- Does not change with valsalva
- Scope: patent NC bil, no extension to NC, clear NP, OP, HP, mobile VCs
- Neck: no LAP
- Skin: no other skin lesions
- Eyes: intact LR and EOM
- CNs grossly intact
- No smilar lesion elsewhere



Next?

Imaging





- MRI: midline cutaneous subcutaneous pedunculated nasal mass with underlying bone defect represent primary skin lesion or **haemangioma**

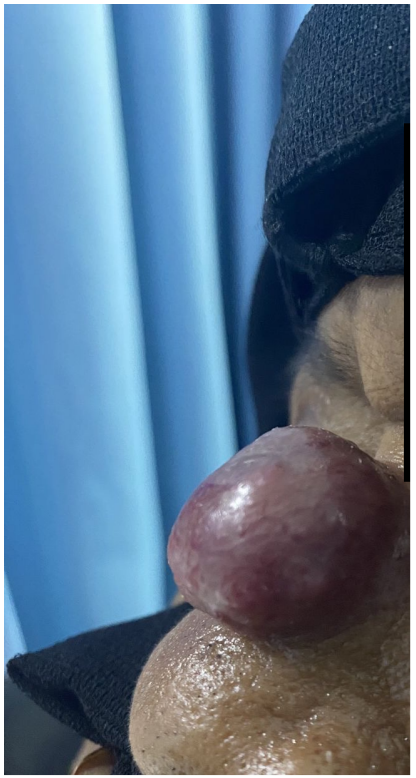
Labs: WNL

How about biopsy?

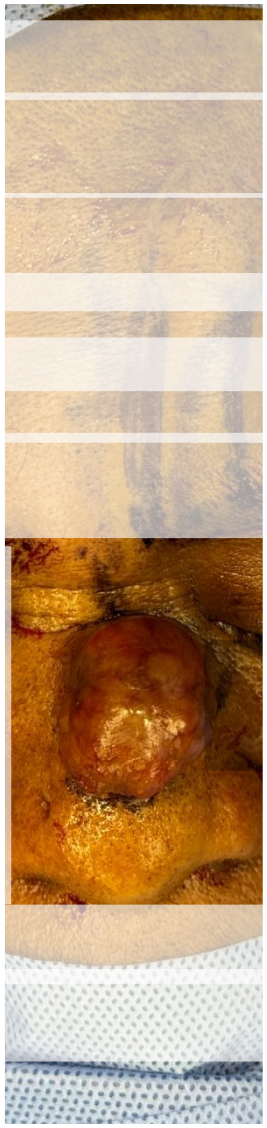
DDx?

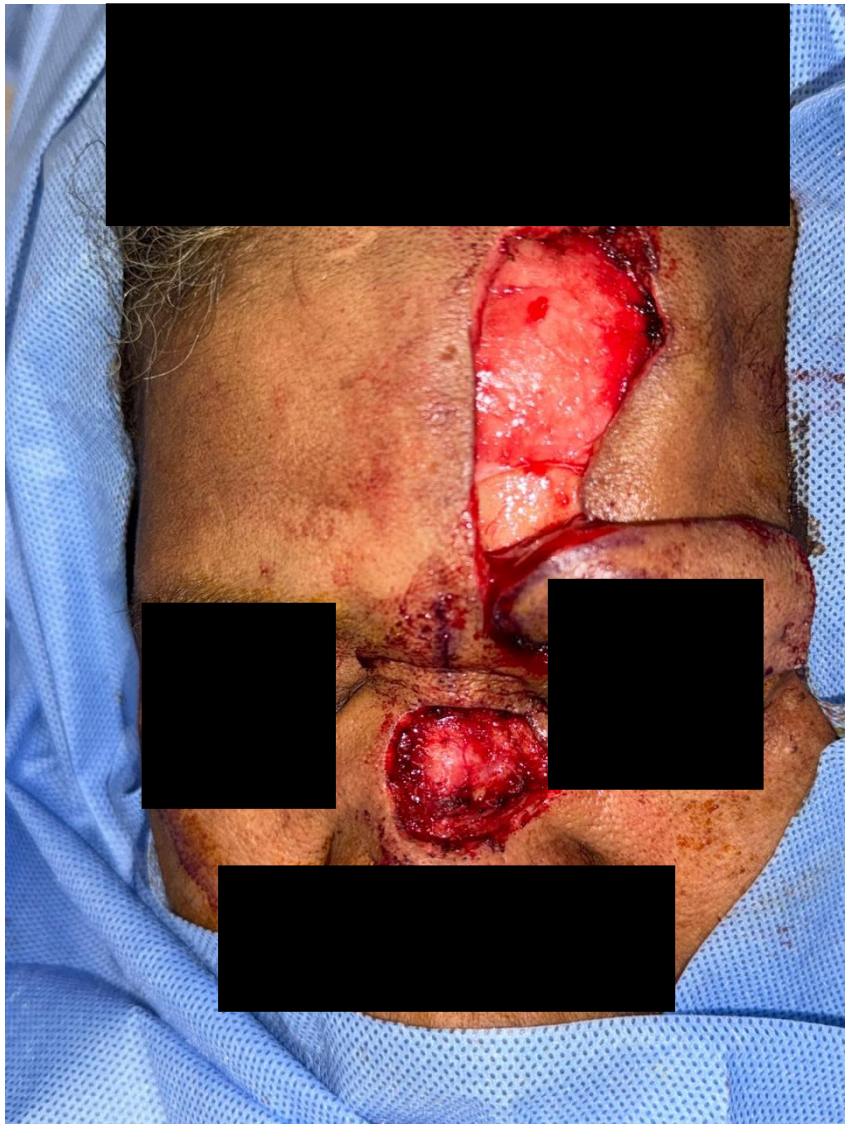
- Hemangioma
- Primary skin lesions (BCC, SCC.. Others)
- Post traumatic deformitis
- Dermoids
- Gliomas
- Encephaloceles
- Extension from inside nose (esthisionneuroblastoma, lymphoma, rhabdomyosarcoma..)
- Infection: leprosy, rhinoscleroma, rhinophyma

How would you manage this pt?



She underwent excision of lesion with staged paramedian forehead flap





Pathology report (final)

- **Diagnosis**: **Merkle cell carcinoma**
- **Tumour size**: 2.8 cm in maximum dimensions at dorsum of the nose
- **Margins**: carcinoma is *present* at surgical resection margins
- **Tumour extent**: epidermis dermis and skeletal muscle fibres
- **Lymphovascular invasion**: *present*

What would you do next?

Survillance

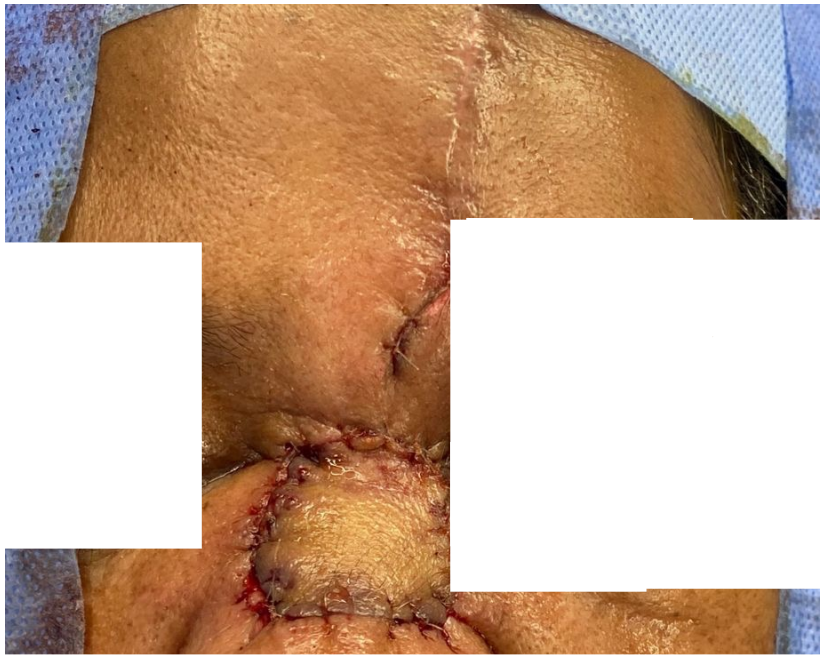
- **CT CAP**: bil level IIB metastatic LNs. -ve CT chest, abdoment and pelvis.

- **PET CT:** hypermetabolic locoregional upper cervical lymphadenopathy in keeping with the locoregional metastasis. Rest of body –ve.

Knowing this, whats you plan for next surgery?

2nd stage surgery

- Realease of PFF pedicle
- Extension of excsion margines with frozen
- All came back –ve



Tumer board

- Case presented in TB
- Final Staging: pT2, pN1, cM0, III
- Final plan: Bilateral MRND (I-IV) + for post operative **radiotherapy**

Follow up

- Surgical sites healed well
- Started RTx last week

Topic Review

cancers

MDPI

Editorial

Merkel Cell Carcinoma: An Update and Review

2023

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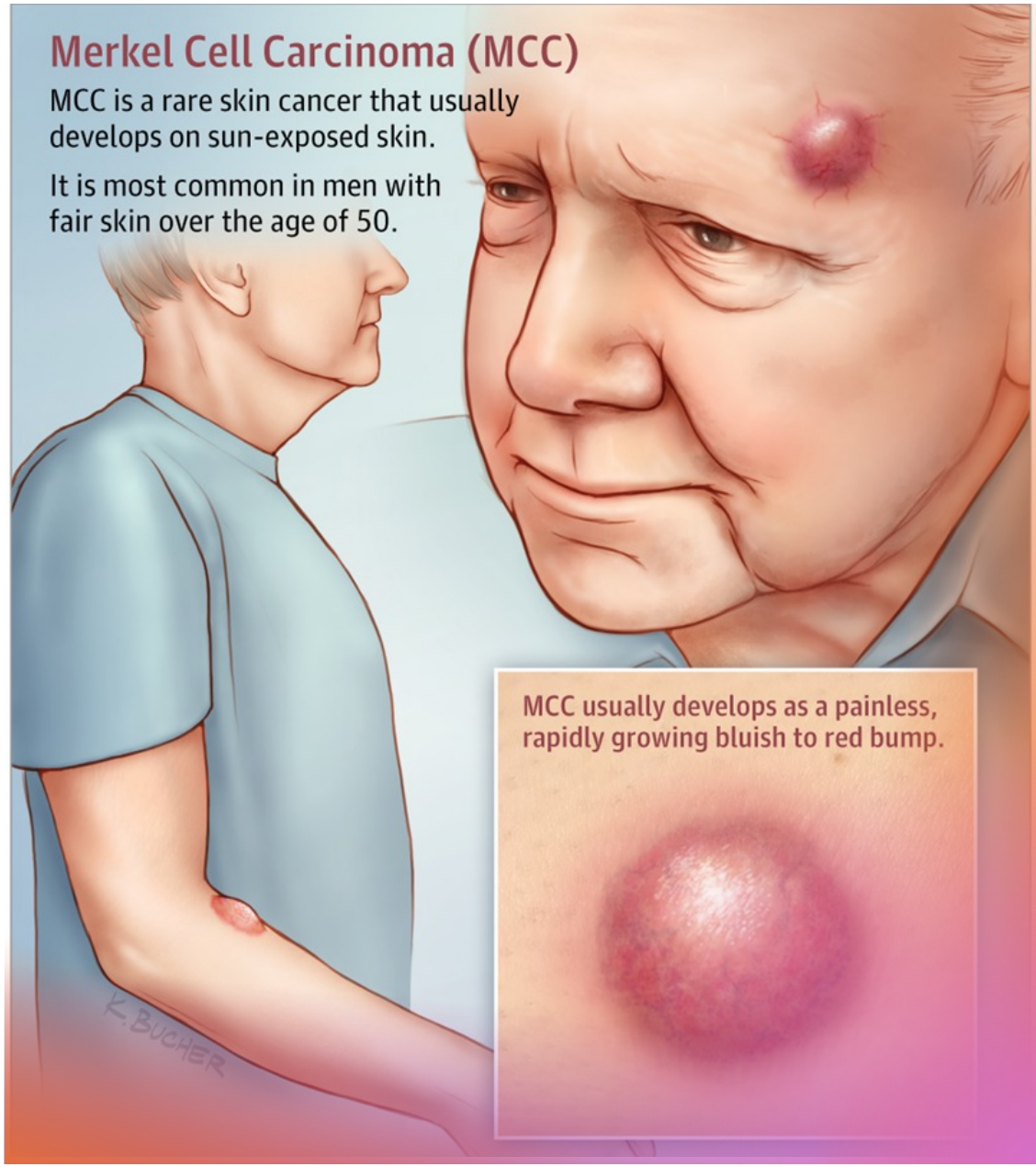
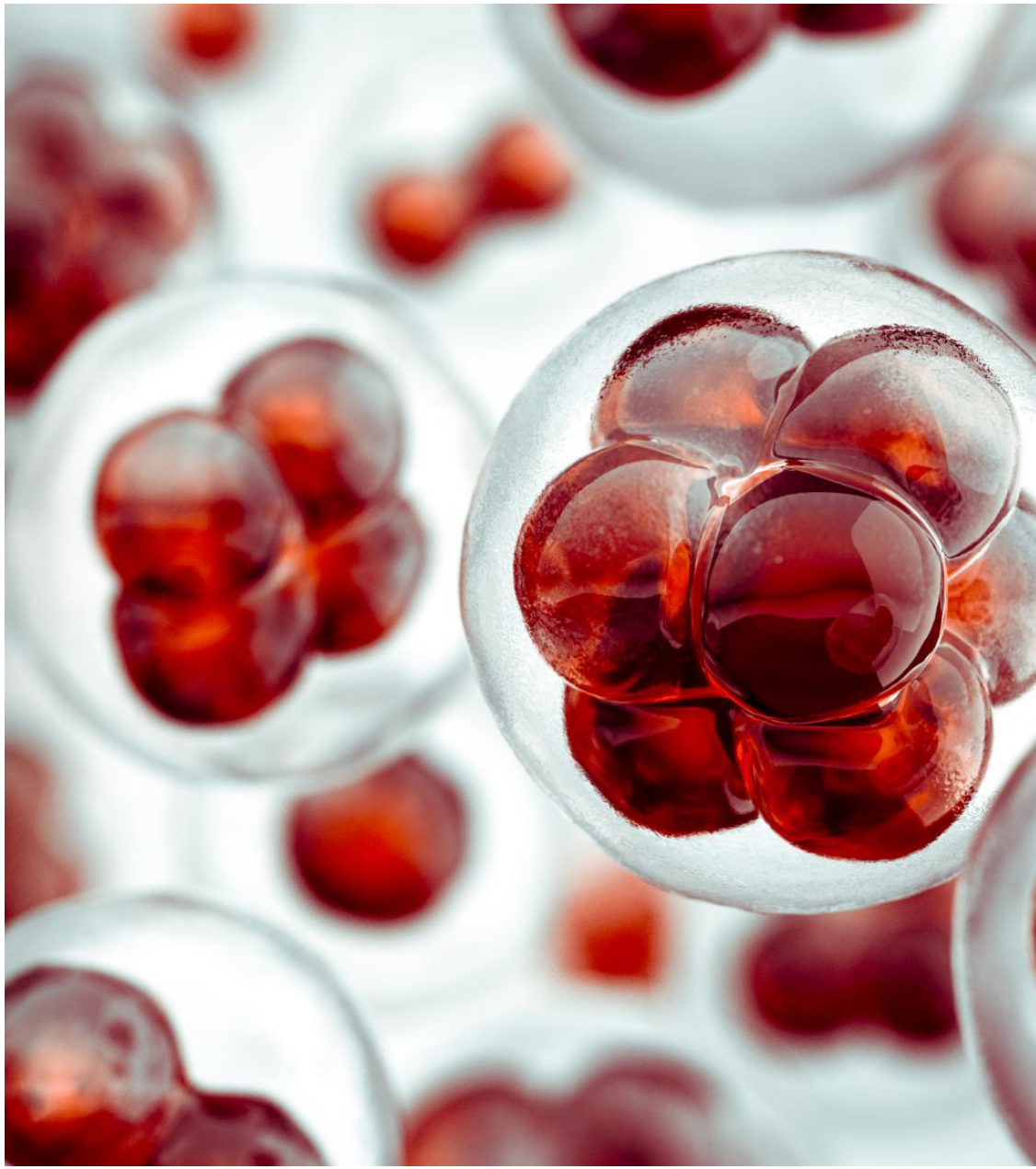
Introduction

- MCC is a rare, aggressive neuroendocrine skin cancer with high mortality rate (~30%).
- Described by Toker in 1972.
- Predominantly affects older individuals and has a high risk of metastasis.
- Since the 1990s, the number of diagnosed cases has increased by 5% to 10% per year.



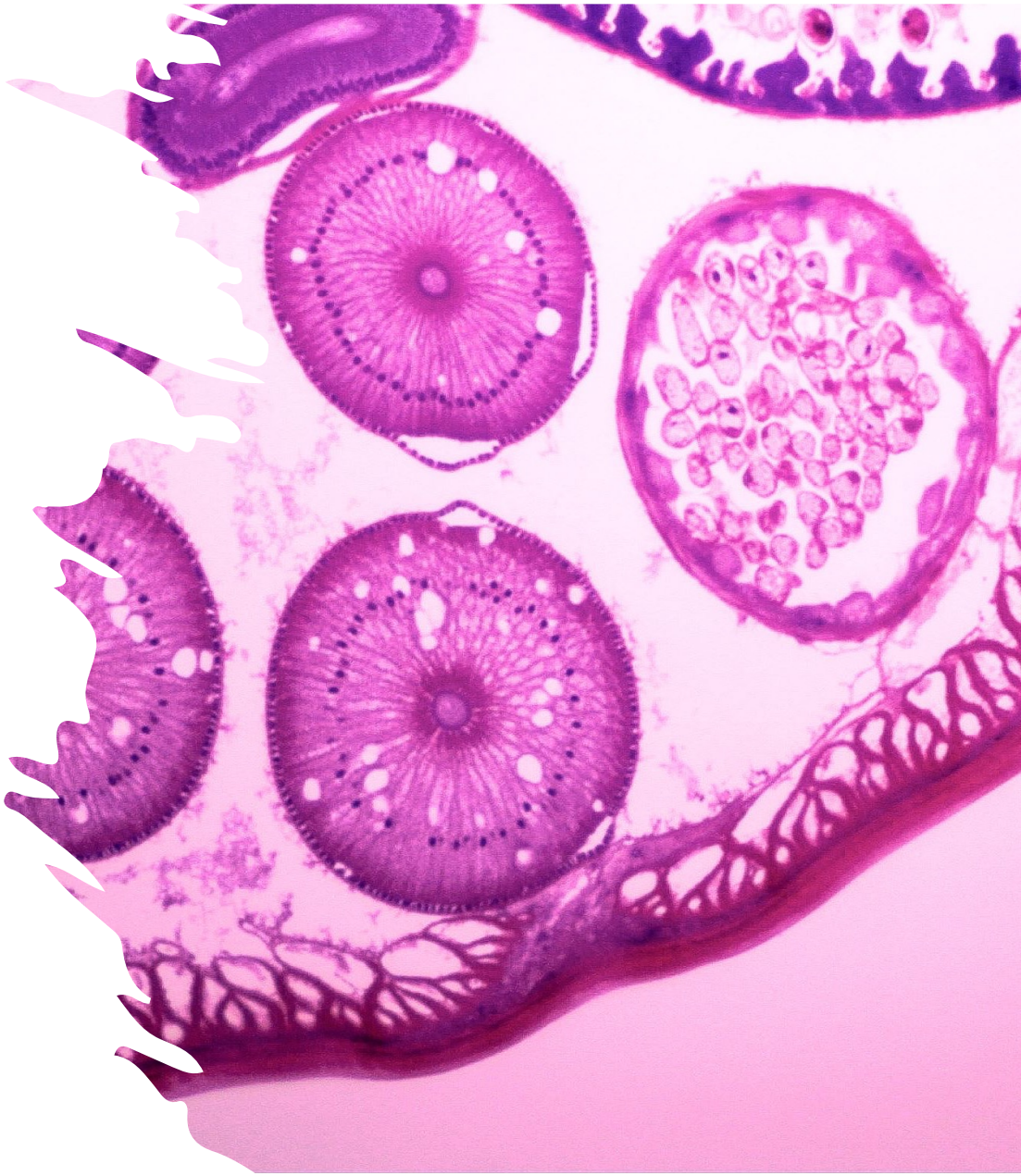
Pathophysiology

- Originates from **Merkel cells**, which are touch receptors in the skin.
- Detection of the **Merkel cell polyomavirus** (MCPyV) in approximately 80% of cases.
- Genetic mutations and **UV radiation-induced** damage also play a significant role.



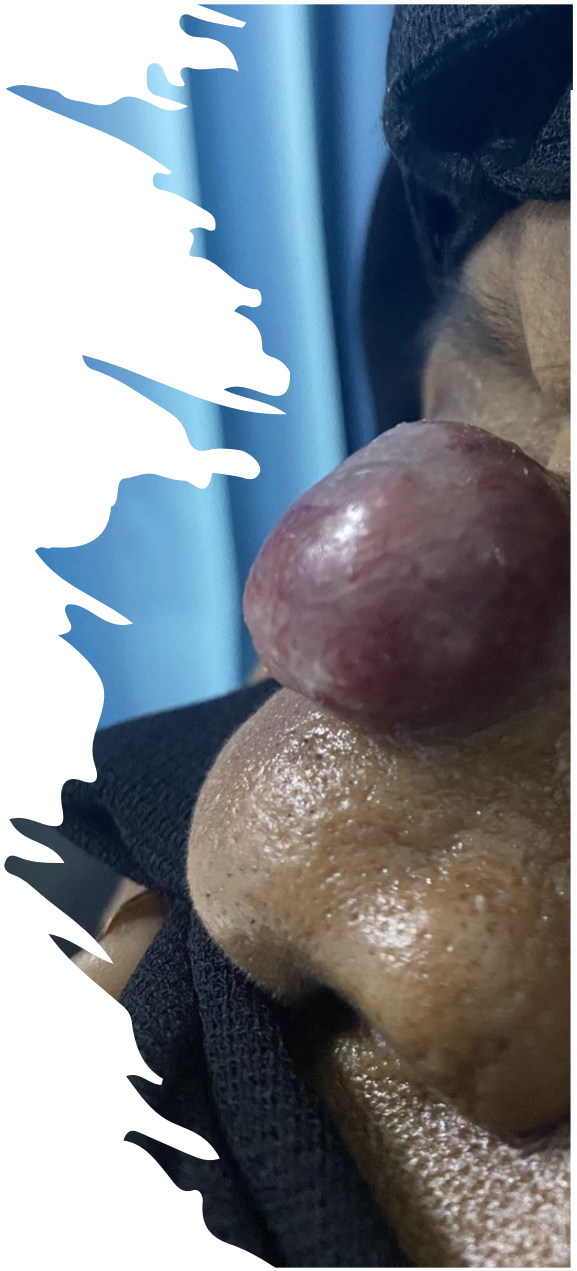
Risk Factors

- Significant **UV exposure** and having a **light skin phenotype**.
- **Immunocompromised states**
- History **of other cancers or chronic inflammatory conditions** affecting the skin.



Clinical Presentation

- Painless, firm, red to violaceous nodule on sun-exposed skin.
- Commonly appears on the head, neck, and extremities.
- Often mistaken for other skin malignancies such as melanoma or lymphoma.
- "**AEIOU**": **A**symptomatic/lack of tenderness, **E**xpanding rapidly, **I**mmune deficiency, **O**lder than 50 years, and **U**V exposure.



Diagnostic Approaches

- **Biopsy** revealing characteristic small, round, blue cells. "*<u>most important</u>*"
- **Imaging**: CT, MRI, PET/CT scans for detecting metastasis and surgical planning.
- **MCPyV serology** (-ve = *poor prognosis).*

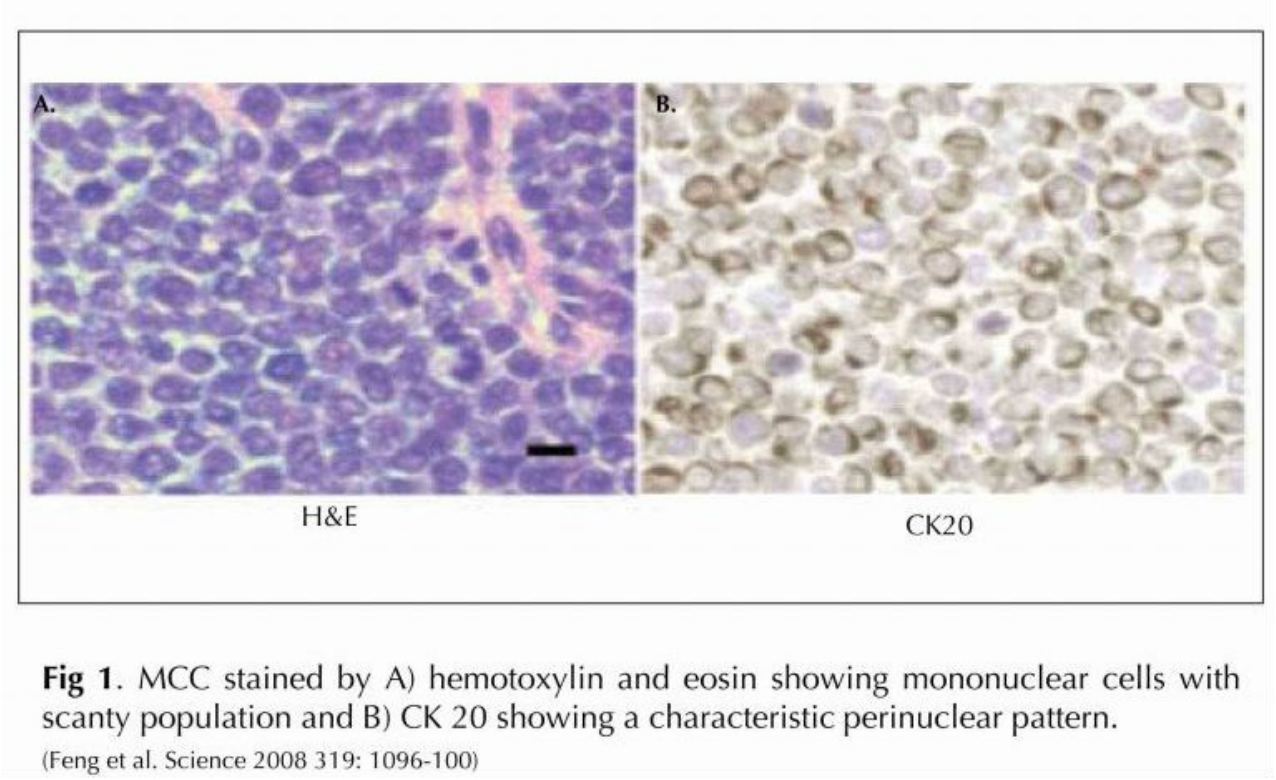
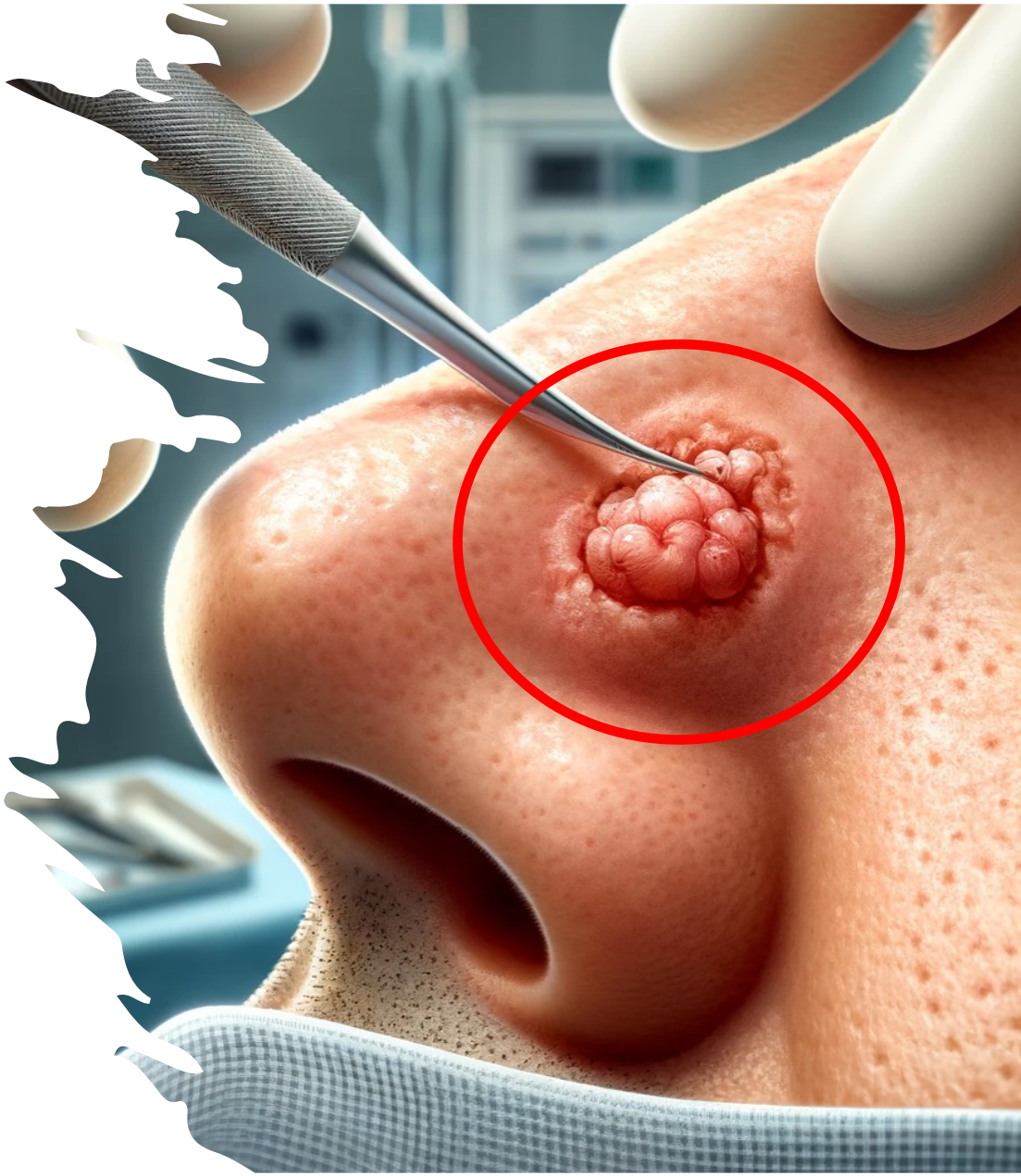


Fig 1. MCC stained by A) hemotoxylin and eosin showing mononuclear cells with scanty population and B) CK 20 showing a characteristic perinuclear pattern.
(Feng et al. Science 2008 319: 1096-100)

***CK20 is a diagnostic marker with high sensitivity and specificity*

Treatment

- Surgical removal with wide local excision (1-2m) is the first-line treatment.
- Adjuvant radiation therapy to reduce recurrence risk.
- Recent approvals in immunotherapies (e.g., checkpoint inhibitors) anti-PD-1/PDL1 inhibitors such as Avelumab, Pembrolizumab, and Nivolumab. *”all still in phase 2 trials”*



Prognosis and Survival Rates

- Prognosis depends on stage at diagnosis, with a 5-year survival rate varying widely from 51% to 64%.
- High recurrence rate ~40%; regular follow-ups are critical.
- Importance of patient education on self-monitoring for new lesions or changes.


Thank
YOU