BCC – Breaking the Confines

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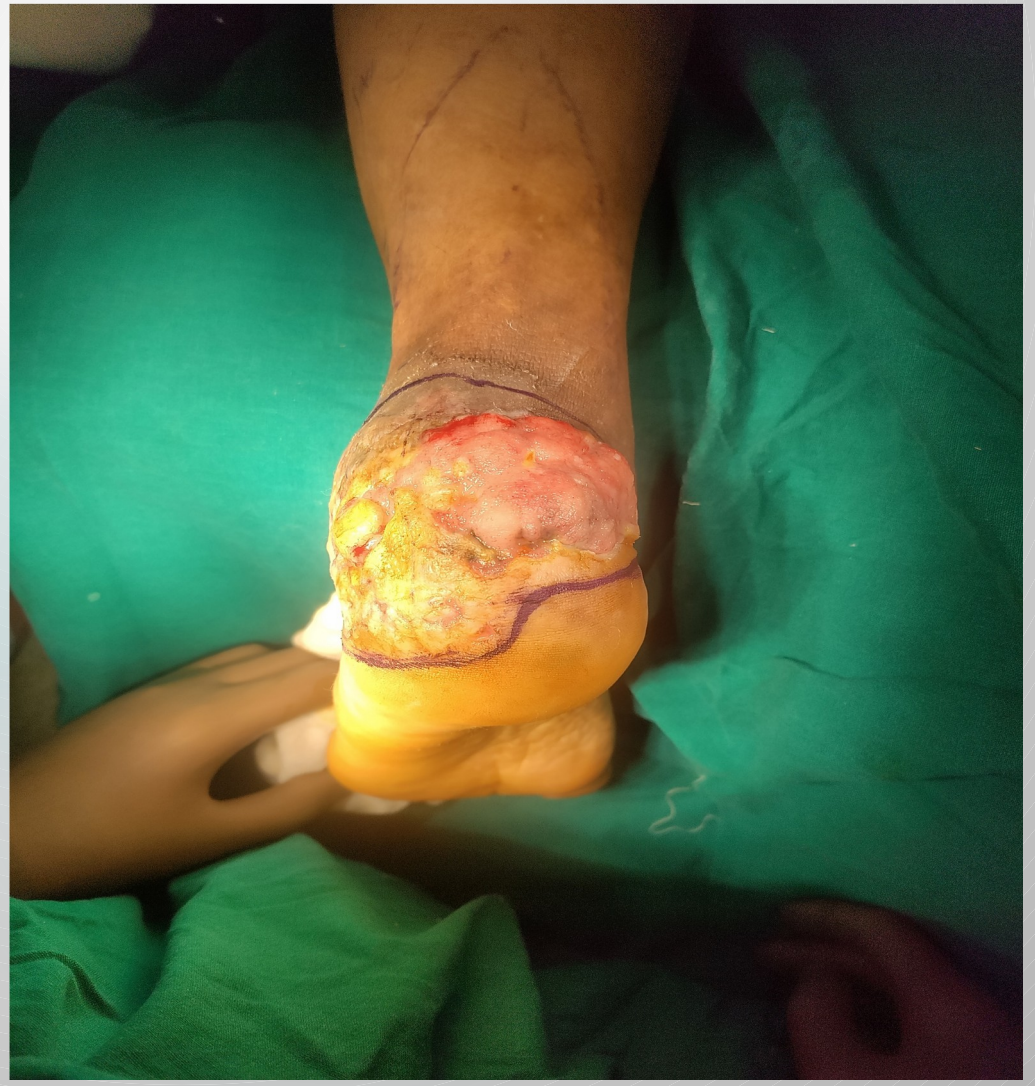
MCH. RESIDENT – DEPARTMENT OF PLASTIC AND RECONSTRUCTIVE SURGERY

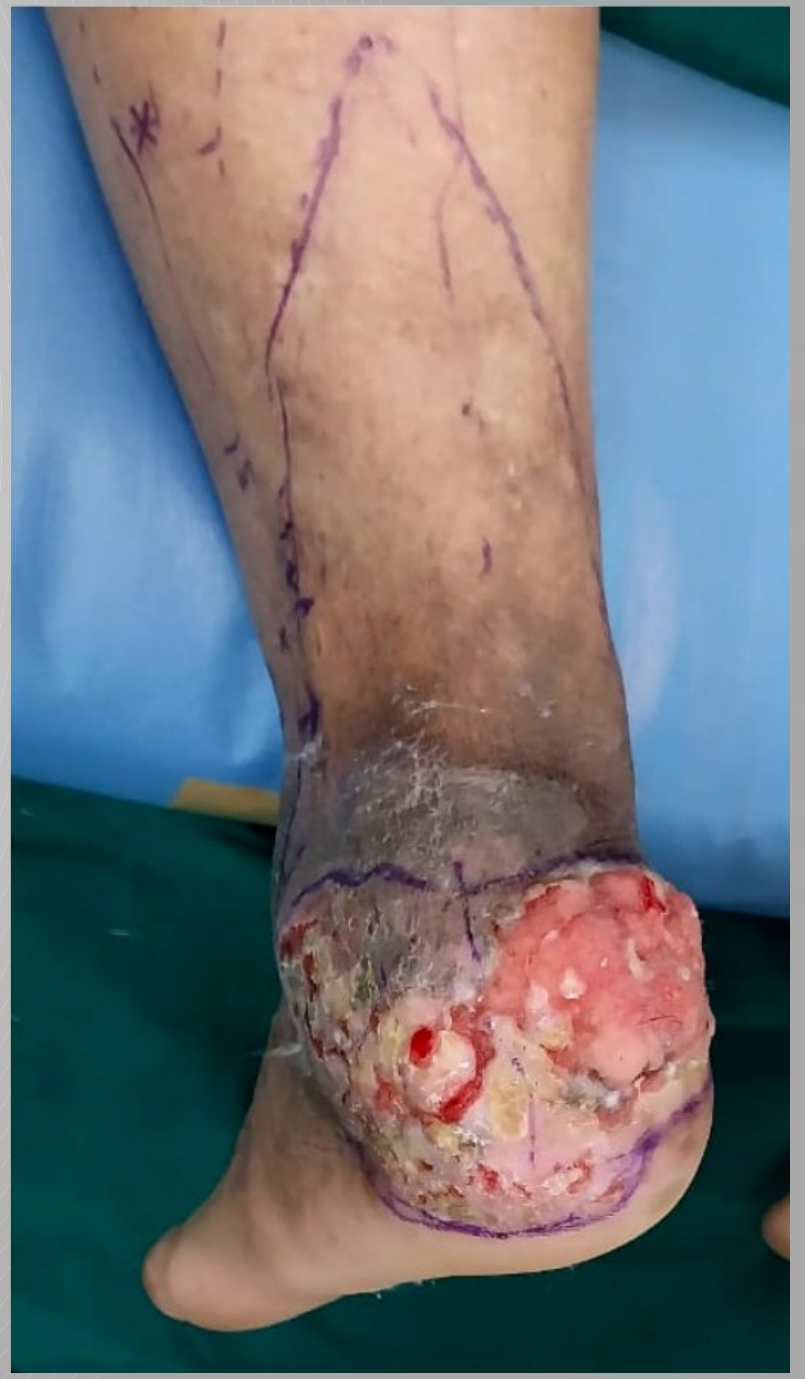
HISTORY



- 65/M
- Ulcer over Left heel for 1 year
- Insidious
- Progressive
- On and off discharge x 6 months

Negative history

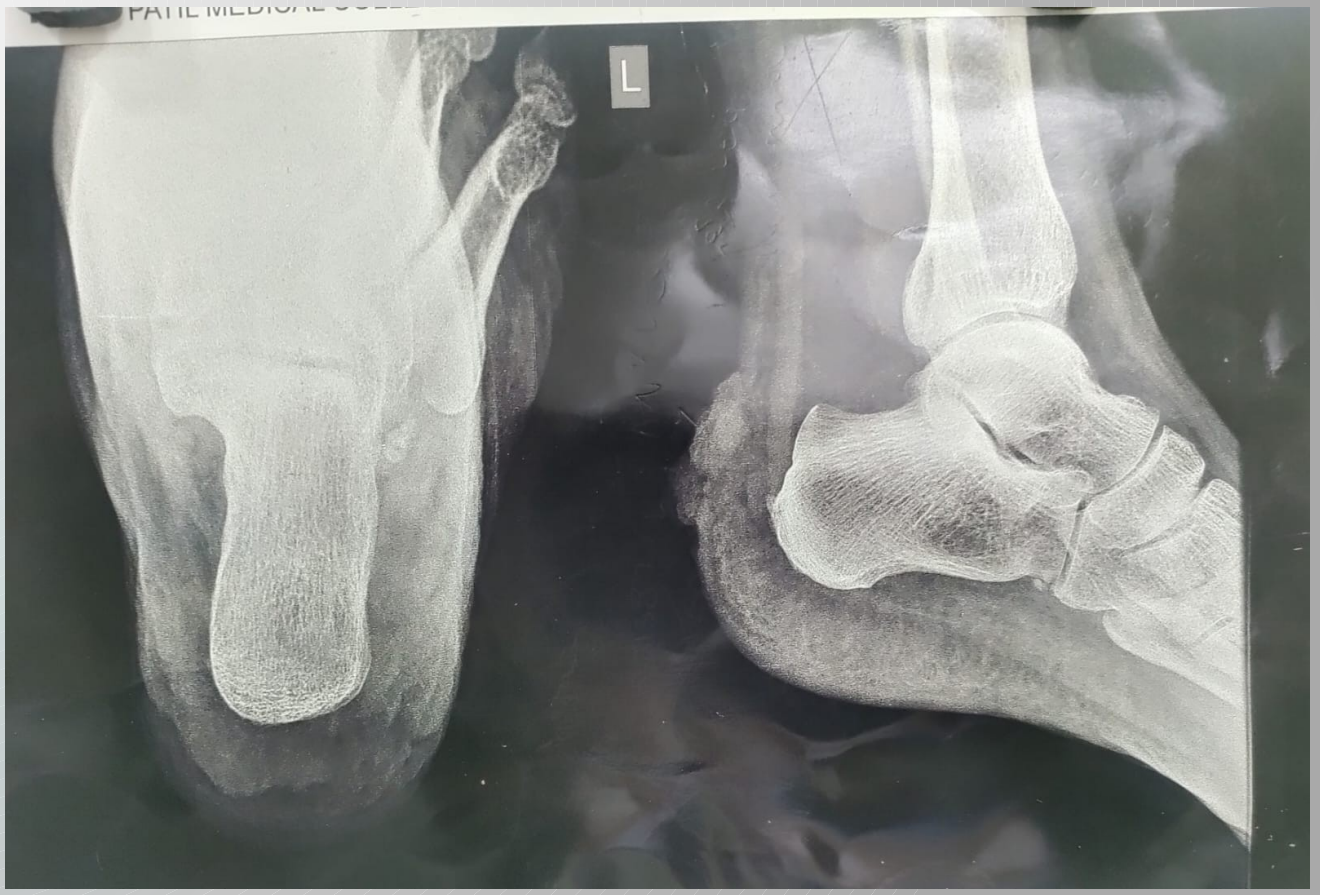
- Trauma
- History of walking bare foot
- Bleeding
- Swelling over the leg
- Pain in the groin
- Discharge of sulphur granules
- Fever



Diagnosis

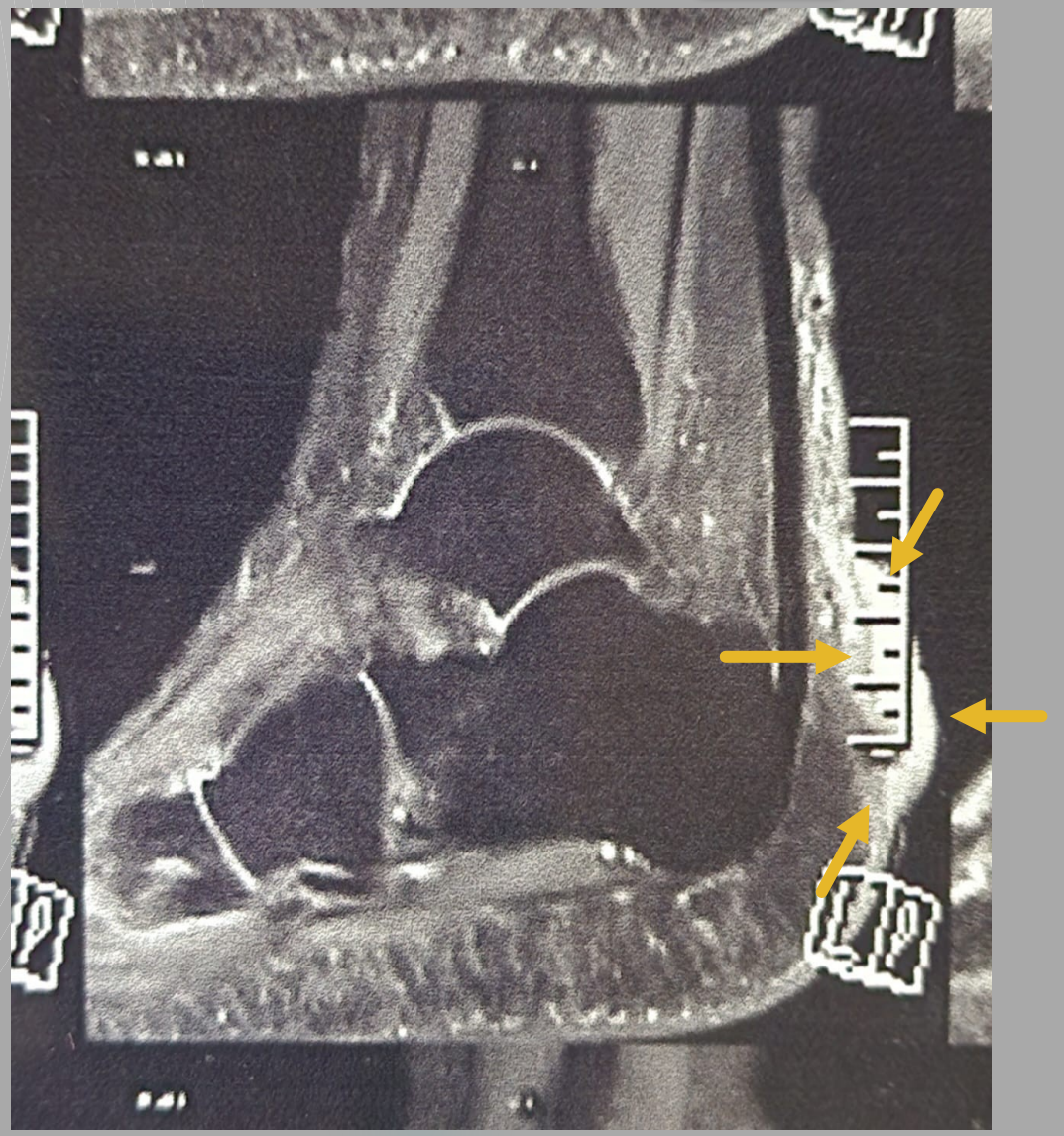
- Infective?
- Foreign body granuloma?
- Malignant etiology?
- Others

X RAY LEFT FOOT



MRI Reveals

- Exophytic lesion arising from Skin
- Protrusion into adjacent tissues
- Multiple T2 hyperintense nodules
- No deep extension up to bone



Biopsy

SATISH JOSHI

PID: 3638879

Age:65.00 Years Sex:MALE

Ref.:Dr.--

SID: 323601734

Collection Date:
13-07-2023 03:56 PM

Registration Date:
13-07-2023 03:56 pm

Report Date:
18-07-2023 10:51 AM

REPORT

HISTOPATHOLOGY REPORT	
HPE no. :	B/3673/23
Clinical details :	C/C of chronic non healing ulcer over posterior aspect of left ankle joint.
Nature of specimen	**Wedge biopsy taken from ulcer margin.**
Gross Examination :	Received 2 grey brown soft tissue pieces, 0.8 x 0.5 x 0.2 cm and 2 x 1 x 0.5 cm. Skin flap of size 0.5 x 0.4 cm. is noted. All for processing (Block 1)
Microscopy :	Section shows fragments of tumour exhibiting ulceration of overlying epithelium. It comprises of down growths, islands and nests of cells exhibiting peripheral palisading of nuclei. The cell have basaloid nuclei and mild to moderate amount of cytoplasm. The stroma is fibromyxoid and infiltrated by chronic inflammatory cells.
Diagnosis :-	**Basal cell Carcinoma.** IHC suggested for confirmation.

Note :-

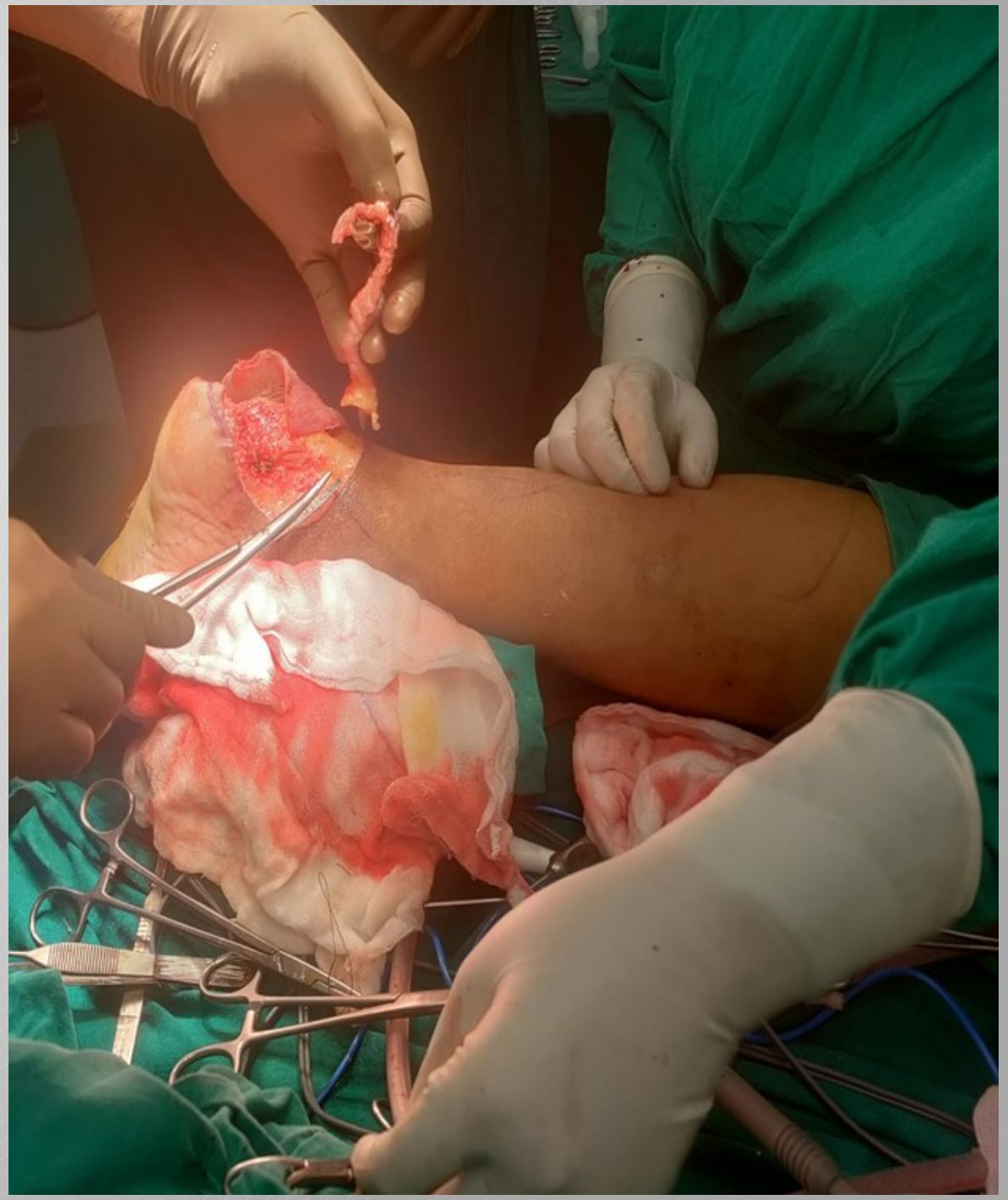
If Specimen preserved, it will be retained in the laboratory for 12 weeks from the date of receipt.

Repeat Biopsy

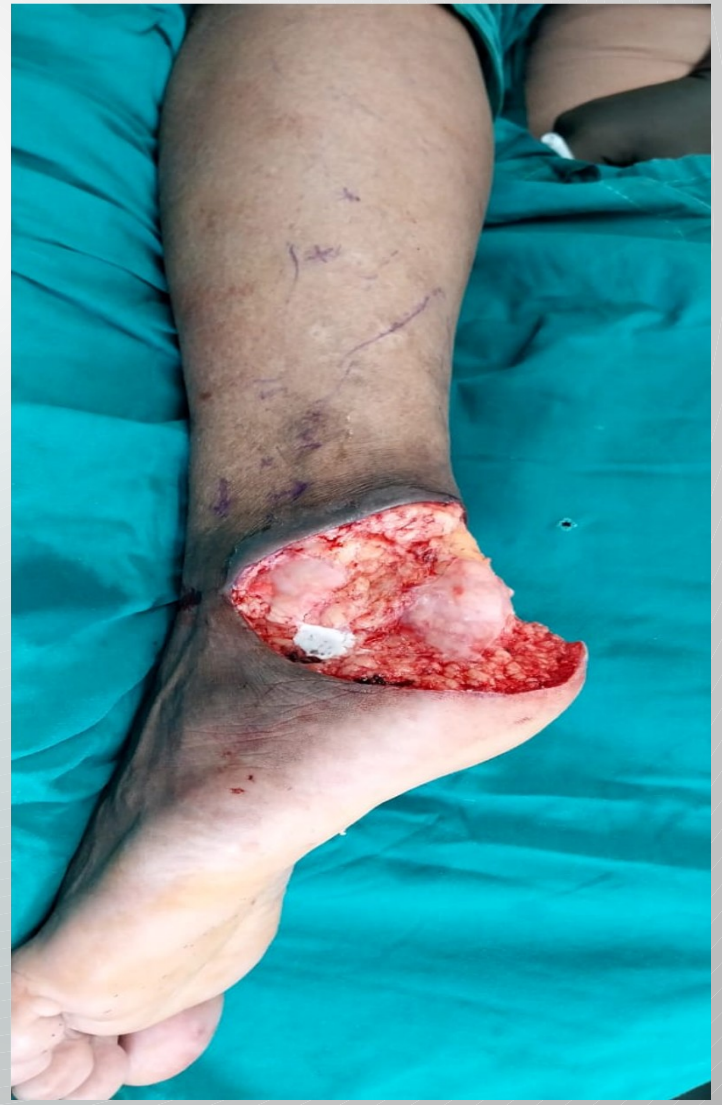
HISTOPATHOLOGY REPORT

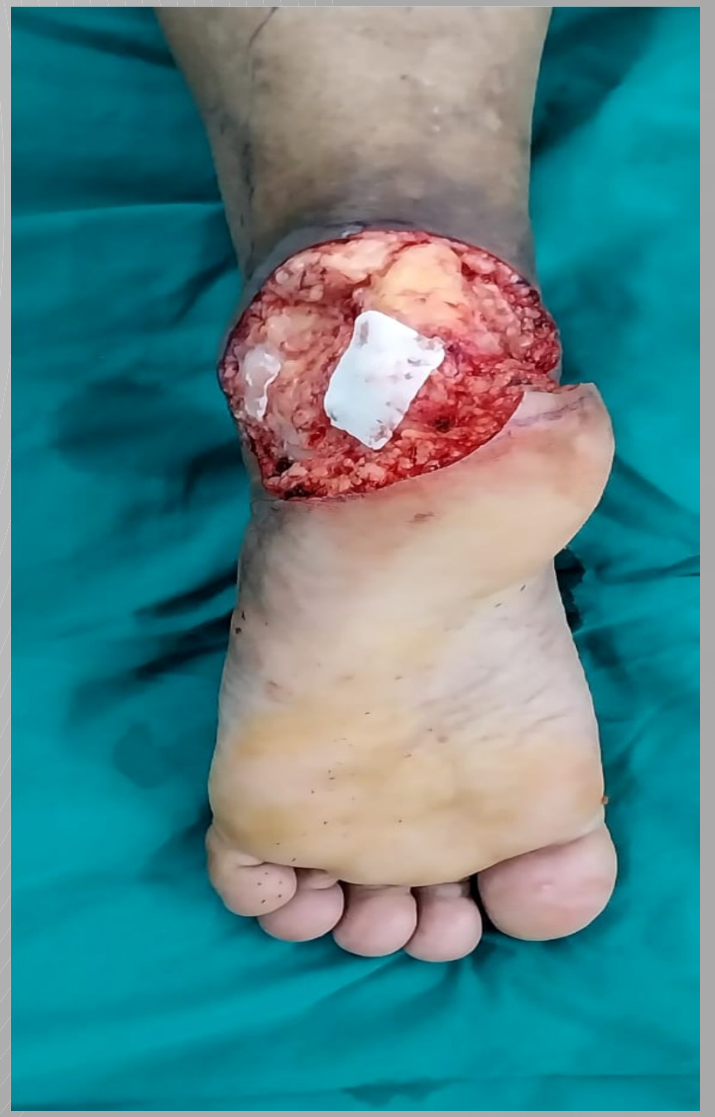
HPE no. :	B/3795/23
Clinical details :	Chronic non healing, ulcer over posterior aspect of left ankle joint.
Nature of specimen	**HPE of wedge biopsy of ulcer over posterior aspect of left heel.**
Gross Examination :	Received multiple grey brown soft tissue bits & pieces ranging from 0.1 x 0.1 x 0.1 cm to 1 x 0.5 x 0.5 cm & aggregating to 1.2 x 1 x 0.5 cm. Sections - 01 - 3 bits. 02 - 3 bits. 03 - 3 bits.
Microscopy :	Seen by Dr. Sushama Gurwale. Sections show only fragments of a tumour which show malignanct cells arranged in nests and islands with palisading pattern of nuclei. The individual cells are having basaloid nuclei with scant to moderate amount of cytoplasm. Sections also show chronic inflammation and fibromyxoid change.
Diagnosis :-	**Suggestive of Basal cell carcinoma.** **IHC for confirmation.** Advice- Also see report B/3673/23

Surgery

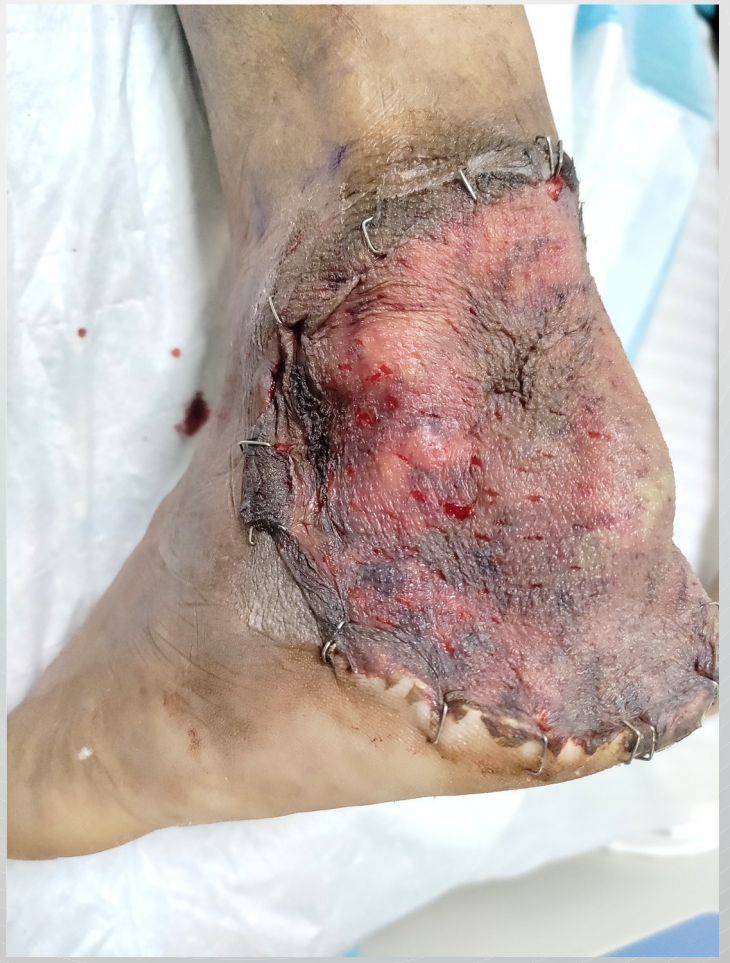


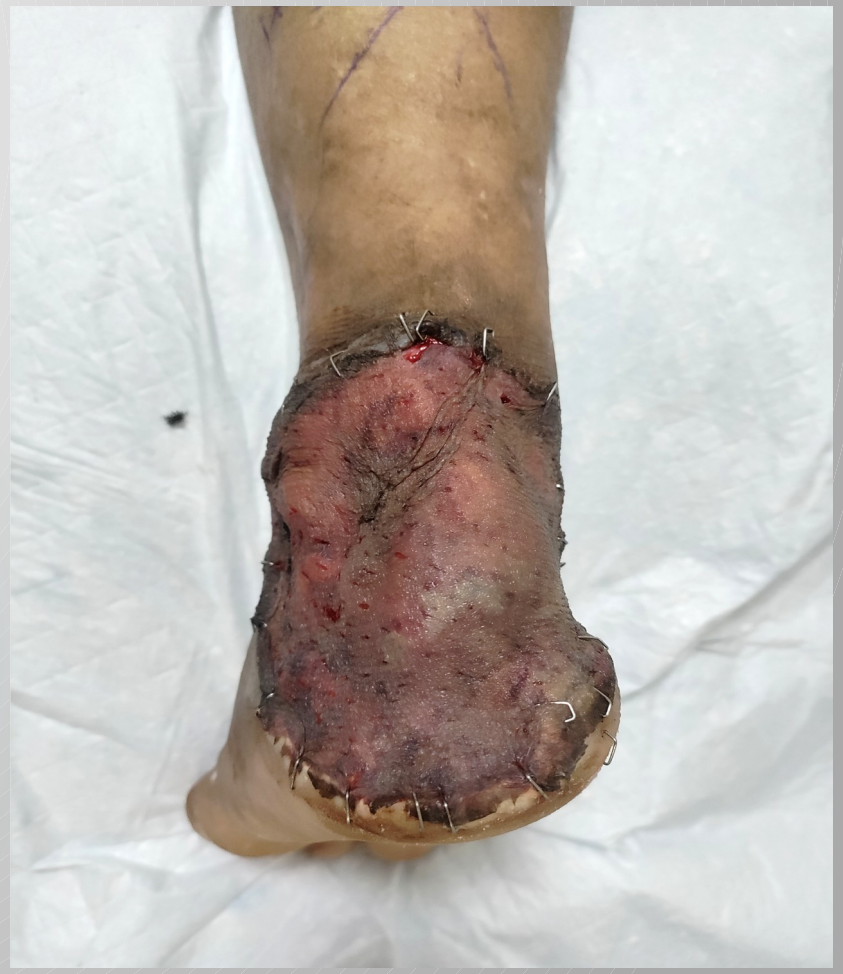
Post Excision

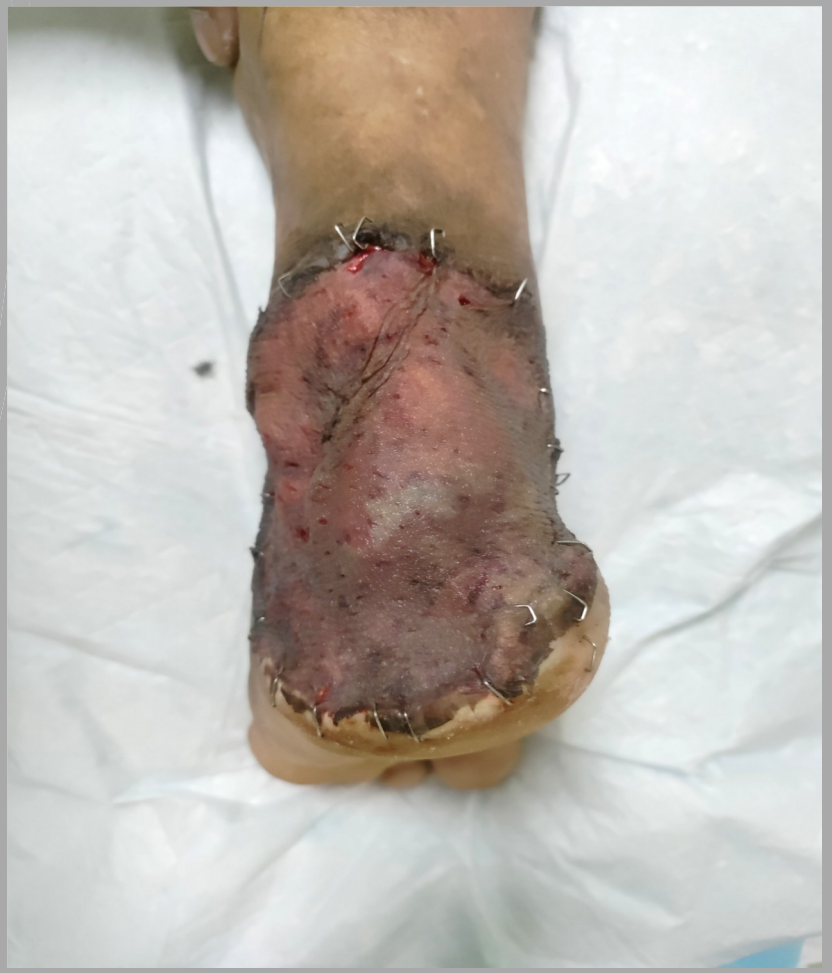




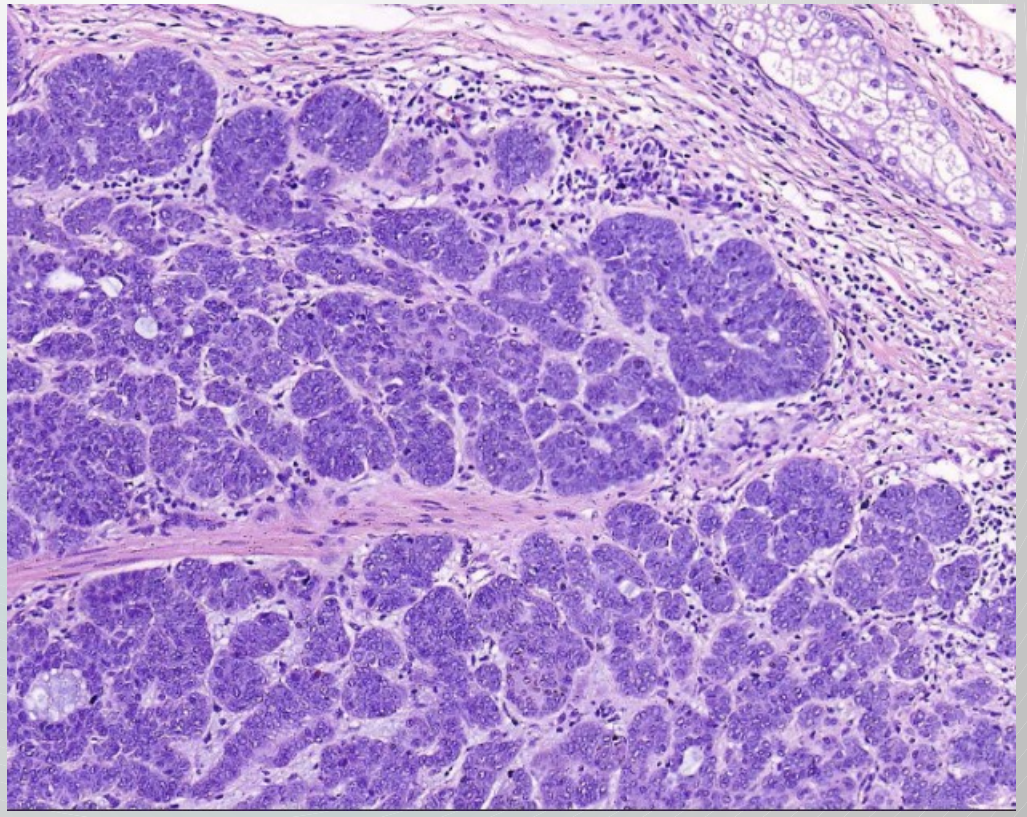
POD 5







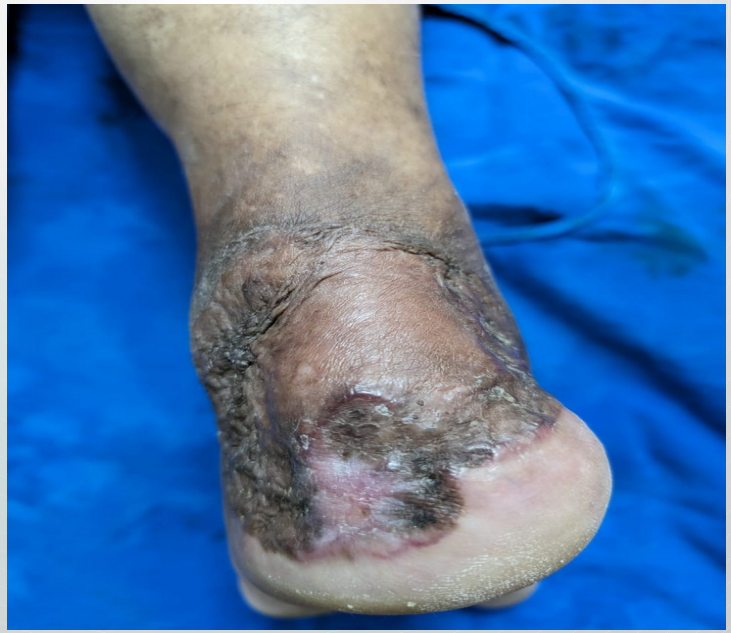
Final Histopathology report

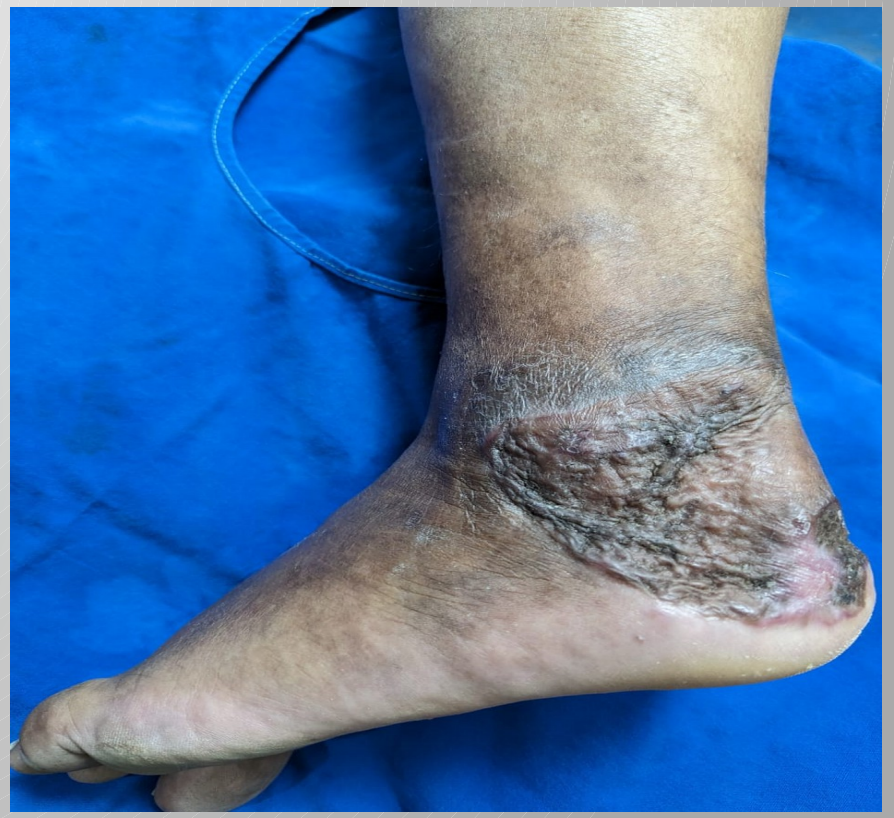


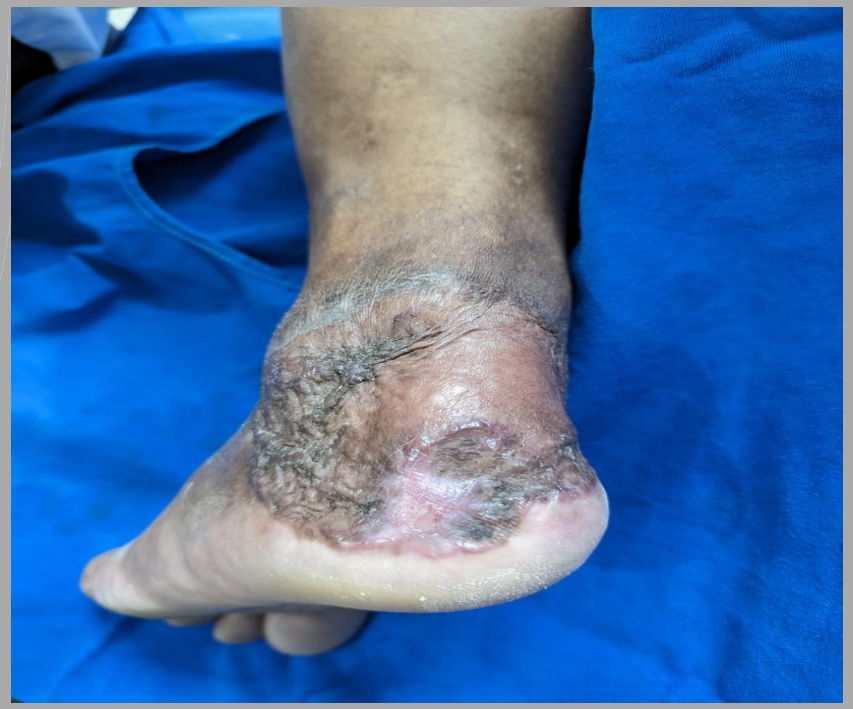
HISTOPATHOLOGY REPORT	
HPE no. :	B/4463/23
Clinical details :	
Nature of specimen	HPE of excised specimen of mass with attached skin flap from left posterior aspect of ankle.

Diagnosis :-	Basal cell carcinoma - infiltrating type. All surgical margins (superior, inferior, lateral, revised medial and base) are free of tumor. Perineural and lymphovascular invasion - Absent.

FOLLOW UP







FINAL DIAGNOSIS

- BASAL CELL CARCINOMA – INFILTRATING TYPE
- GIANT BASAL CELL CARCINOMA
- Giant BCC defined as tumor with a diameter

greater than 5 cm

Archontaki M, Stavrianos SD, Korkolis DP, Arnogiannaki N, Vassiliadis V, Liapakis IE, Christ H, Rapidis AD, Kokkalis G. Giant Basal cell carcinoma: clinicopathological analysis of 51 cases and review of the literature. Anticancer Res. 2009 Jul;29(7):2655-63. PMID: 19596942

Literature provides insights into Giant BCC

Literature on Giant BCC is scanty.

- Incidence rate: 0.5 – 1 % of all BCC
- Anatomical distribution of GBCC different with predominance on trunk, especially on Back

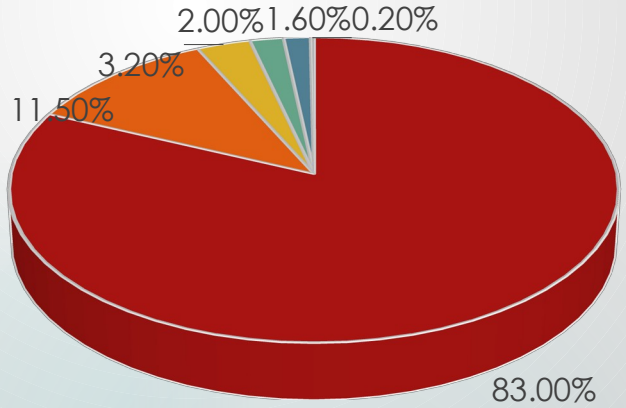
(?escape detection)

- Betti R, Inselvini E, Moneghini L and Crosti C: Giant basal cell carcinoma: Report of four cases and considerations. J Dermatol *24(5)*: 317-321, 1997
- Archontaki M, Stavrianos SD, Korkolis DP, Arnogiannaki N, Vassiliadis V, Liapakis IE, Christ H, Rapidis AD, Kokkalis G. Giant Basal cell carcinoma: clinicopathological analysis of 51 cases and review of the literature. Anticancer Res. 2009 Jul;29(7):2655-63. PMID: 19596942

A Peculiar case

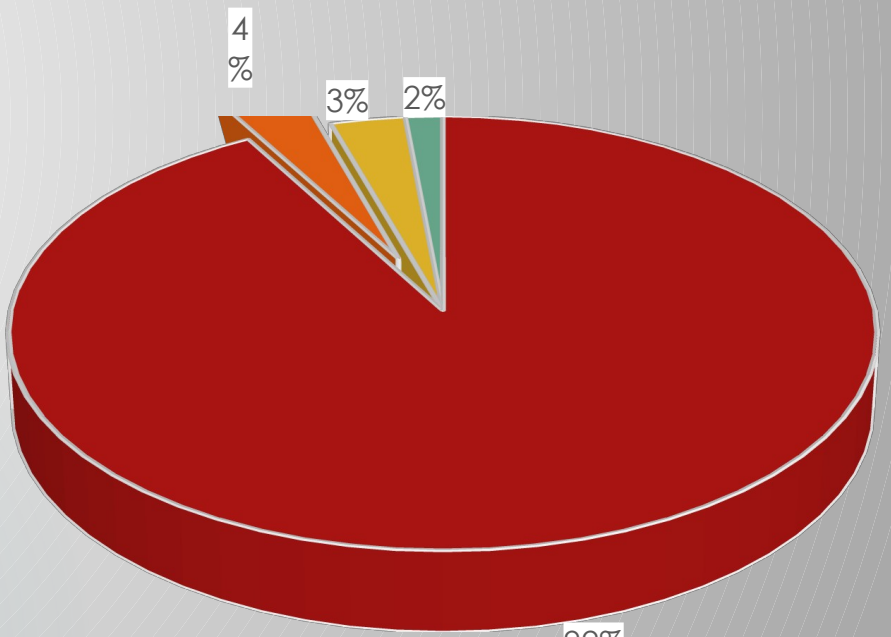
- Unusual Site
- Unusual Size

Location of BCC in literature



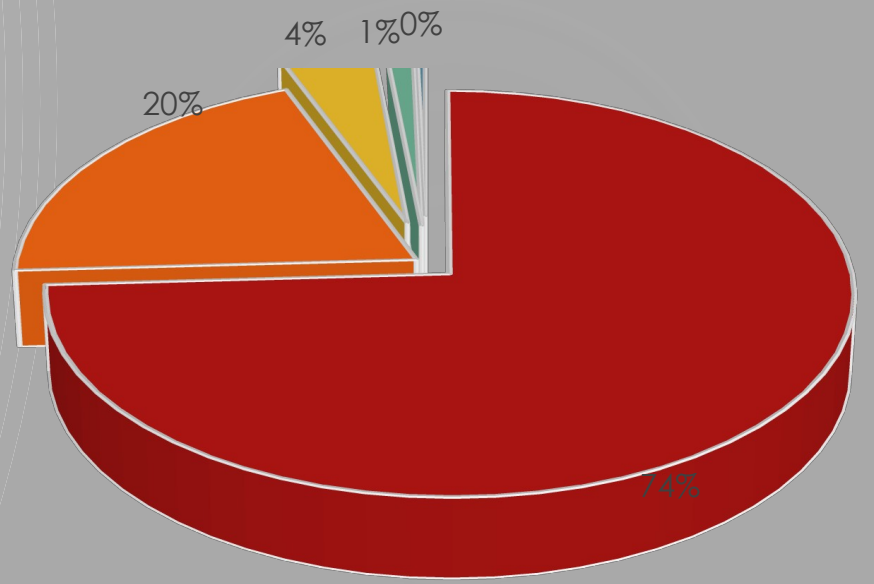
N=13,457

Head
Trunk
Upper limb
Lower limb
unknown
Genitalia



N=197

Head and Neck
unknown
Limbs
Trunk



N=1050

Head and Neck
Trunk
Lower limb
Upper Limb
Genitalia

Y. Scrivener, E. Grosshans, B. Cribier, Variations of basal cell carcinomas according to gender, age, location and histopathological subtype, British Journal of Dermatology, Volume 147, Issue 1, 1 July 2002, Pages 41–47,
Hakverdi S, Balci DD, Dogramaci CA, Toprak S, Yaldiz M. Retrospective analysis of basal cell carcinoma. Indian J Dermatol Venereol Leprol. 2011 Mar-Apr;77(2):251. doi: 10.4103/0378-6323.77483. PMID: 21393972
Betti R, Bruscagin C, Inselvini E, Crosti C. Basal cell carcinomas of covered and unusual sites of the body. Int J Dermatol 1997;36:503–505.

Questions to Answer

- Unusual size , unusual location
- Unusual biology?
- If so, Unusual Risks?
    a) Of Recurrence
    b) Of Metastasis
- Do they demand different treatment ?

Recurrence?

- Risk of recurrence:
  - Tumour size
  - Location
  - Choice of treatment modality
  - Clinical experience of the treating physician

- Primary T2 tumour recurs twice as frequently as T1 tumours
- T3, thrice as frequently as T1 tumours

Bøgelund FS, Philipsen PA, Gniadecki R. Factors affecting the recurrence rate of basal cell carcinoma. Acta Derm Venereol. 2007;87(4):330-4.

Likelihood of Metastasis in BCC

There is a 2% incidence of metastasis for tumors up to **3 cm** in diameter.

- The incidence increases to 25% for tumors up to **5 cm** in diameter
- 50% for tumors up to or larger than **10 cm** in diamete

- Snow SN, Sahl W, Lo JS, Mohs FE, Warner T, Dekkinga JA, Feyzi J. Metastatic basal cell carcinoma. Report of five cases. Cancer. 1994 Jan 15;73(2):328-35. doi: 10.1002/1097-0142(19940115)73:2<328::aid-cncr2820730216>3.0.co;2-u. PMID: 8293396.

Primary site of origin in Metastatic BCC

LOCATION OF PRIMARY	Wysong et al. (194)	von Domarus and Stevens (170)	Freitas, Paola Piva de, et al. (25)
Head and neck	122 (64%)	119 (75%)	12 (48%)
Trunk	41 (21%)	26 (17%)	6 (24%)
Extremities	10 (5%)	11 (17%)	5 (20%)
Genitalia	10 (5%)	2 (1%)	1 (4%)
Multiple sites	9 (5%)	-	1 (4%)

Wysong A, Aasi SZ, Tang JY. Update on Metastatic Basal Cell Carcinoma: A Summary of Published Cases From 1981 Through 2011. *JAMA Dermatol.* 2013;149(5):615–616. doi:10.1001/jamadermatol.2013.3064

von Domarus H, Stevens PJ. *Metastatic basal cell carcinoma. Report of five cases and review of 170 cases in the literature.* J Am Acad Dermatol 1984 Jun;10(6):1043-60

Freitas, Paola Piva de, et al. "Metastatic Basal Cell Carcinoma: A Rare Manifestation of a Common Disease."

- Incidence of BCC in head and neck

  ~92%

- In cases of metastasis of BCC
  - ~62% were originating from the head and neck

WHEREAS:

- Incidence of BCC in other locations primary: ~8%

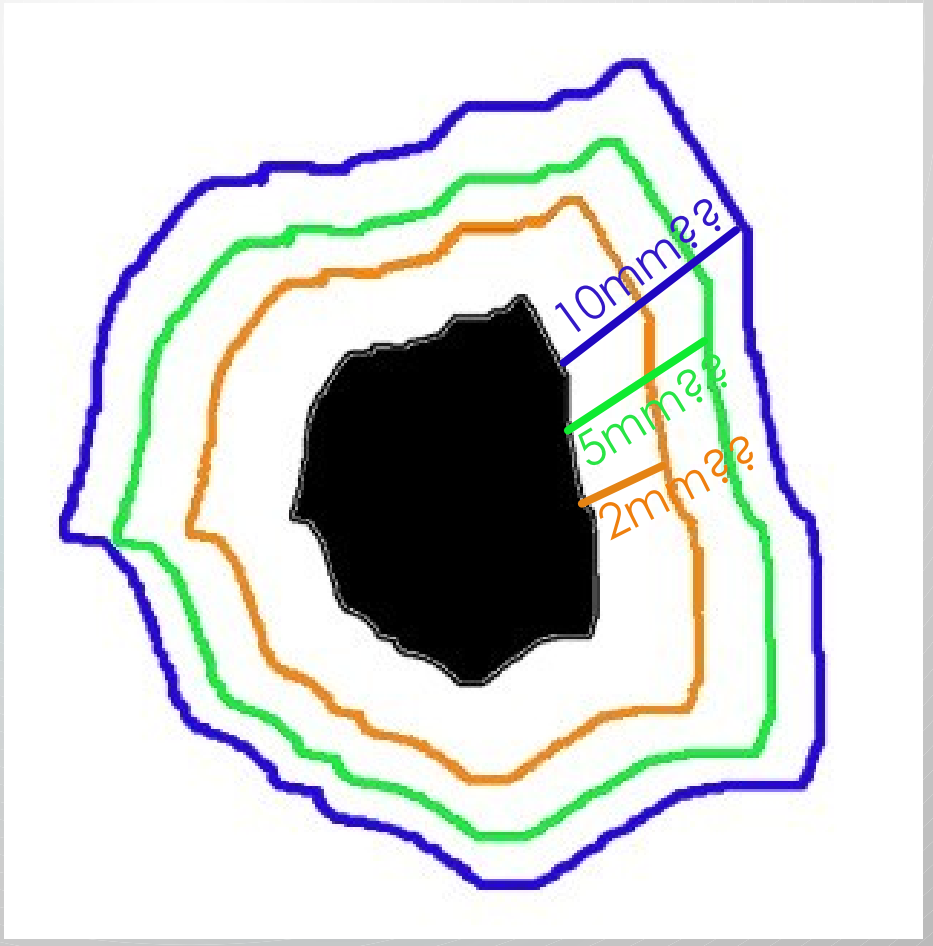
- In cases of metastasis of BCC
  - ~38% were originating from other locations

This is suggestive, that unusual locations of BCC have a higher chance of having metastatic lesions

Is unusual location risk factor for Metastasis?

- NOT CLEAR
- "*It is not clear whether an unusual site carries an additional risk of Metastasis*"

Unusual size, unusual site ….different approach to excision?



How wide must the excision be?

- **2 to 4 mm margins** for low-risk,
- **4 to 6 mm** for high risk
- **"**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**" – NCCN Guidelines (2024)**

1. Schell AE, Russell MA, Park SS. Suggested excisional margins for cutaneous malignant lesions based on Mohs micrographic surgery. JAMA Facial Plast Surg 2013;15:337–343.
2. Quazi SJ, Aslam N, Saleem H, et al. Surgical margin of excision in basal cell carcinoma: a systematic review of literature. Cureus 2020;12:e9211

CONCLUSION

- **The risk of metastasis with increasing size is very real**
- **Association between unusual site and metastasis is yet unclear**

Thank you