

# A TABLE OF BCC, SCC & MELANOMA



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	BASAL CELL CARCINOMA (RODENT ULCER)	SQUAMOUS CELL CARCINOMA (EPITHELIOMA)	MALIGNANT MELANOMA
DEFINITION	<ul style="list-style-type: none"> <li>Locally malignant skin lesion arising from:</li> <li>1. Basal cells of epidermis.</li> <li>2. Equivalent cells of hair follicles, sweat &amp; sebaceous glands.</li> </ul>	<ul style="list-style-type: none"> <li>Malignant skin lesion arising from prickle cell layer.</li> </ul>	
INCIDENCE	<ul style="list-style-type: none"> <li>&gt; 40 years.</li> <li>M &gt; F.</li> <li><i>The commonest</i> malignant skin lesion (80%).</li> </ul>	<ul style="list-style-type: none"> <li>Old age.</li> <li>M &gt; F.</li> </ul>	<ul style="list-style-type: none"> <li>Adult &amp; old age.</li> <li>M &gt; F.</li> <li><i>The most serious</i> malignant skin lesion.</li> </ul>
PREDISPOSING FACTORS	<ul style="list-style-type: none"> <li>Prolonged exposure to ultraviolet sun rays.</li> <li>Albinism &amp; xeroderma pigmentosa.</li> </ul>	<ul style="list-style-type: none"> <li>Albinism &amp; xeroderma pigmentosa.</li> <li>Prolonged exposure to carcinogenic agents as tar derivatives.</li> <li>Prolonged irritation as chronic granuloma, ulcers or burn scars.</li> <li>Previous exposure to irradiation.</li> <li>Solar / actinic keratosis.</li> <li><u>Senile keratosis</u>: dry, rough, inelastic, pigmented areas of skin in old age.</li> <li><u>Bowen's disease</u>: well defined, rounded, rough scaly, red areas of skin (SCC in situ).</li> <li><u>Marjolin's ulcer</u>: SCC in a chronic site of inflammation (e.g. osteo-myelitis sinus).</li> </ul>	<ul style="list-style-type: none"> <li>Albinism &amp; xeroderma pigmentosa.</li> <li>On top of a benign nevus: <ul style="list-style-type: none"> <li>Junctional type in adult.</li> <li>Giant hairy nevus.</li> <li>Naevi subjected to repeated trauma.</li> </ul> </li> <li>Criteria of malignant transformation of a benign nevus: <ul style="list-style-type: none"> <li>↑ in size, thickness or pigmentation.</li> <li>Occurrence of itching, tingling, ulceration or bleeding.</li> <li>Development of satellite nodules around it.</li> <li>Hard in consistency.</li> <li>Enlarged hard draining LNs.</li> </ul> </li> </ul>
PATHOLOGY SITE	<ul style="list-style-type: none"> <li>Most common (90%) in the face above a line drawn from the angle of the mouth to the lobule of the ear (especially the inner &amp; outer canthi of the eye &amp; the naso-labial fold).</li> </ul>	<ul style="list-style-type: none"> <li>Scalp &amp; dorsum of the hands.</li> <li>Lips &amp; muco-cutaneous junctions.</li> <li>Tongue &amp; esophagus.</li> </ul>	<ul style="list-style-type: none"> <li><u>1. Superficial spreading (64%):</u> <ul style="list-style-type: none"> <li>Occurs in any part of the body – usually in <i>middle</i> age.</li> <li>The lesion is raised above the surface &amp; has an irregular edge.</li> </ul> </li> </ul>
GROSS PICTURE	<ul style="list-style-type: none"> <li>✓ <u>Nodular form</u>:</li> <li>A small nodule which ulcerates with serous discharge &amp; bleeding.</li> <li>✓ <u>Ulcerative form</u>: <ul style="list-style-type: none"> <li>Raised, rolled in &amp; beaded edges.</li> <li>Granular, red, scaly floor.</li> <li>Indurated base (induration does not extend beyond the visible margin of the ulcer).</li> <li><i>Margin</i>: dilated capillaries (telangiectasia).</li> <li><i>Discharge</i>: blood &amp; pus.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Malignant ulcer with: <ul style="list-style-type: none"> <li>Raised &amp; everted edges.</li> <li>Necrotic floor.</li> <li>Fixed indurated base (induration extends beyond the visible margin of the ulcer).</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><u>2. Nodular (12-25%):</u> <ul style="list-style-type: none"> <li>Occurs in any part of the body – usually in <i>young</i> age.</li> <li>The lesion is nodular, dark in color &amp; liable to ulcerate.</li> <li>The most malignant type.</li> </ul> </li> </ul>

	<p>✓ <u>Uncommon types:</u></p> <ul style="list-style-type: none"> <li>• Excavating (sub-marine – iceberg): the ulcer erodes deep in the underlying structures.</li> <li>• Field fire: rapidly spreading superficial ulcer with advancing periphery &amp; healing center.</li> <li>• Tubular: over the scalp.</li> <li>• Superficial: red scaly patch with raised edge over the trunk.</li> <li>• Pigmented.</li> </ul>		<p>3. <u>Lentigo maligna (Hutchinson's melanotic freckle) (1-15%):</u></p> <ul style="list-style-type: none"> <li>• Occurs in <i>face</i> – usually in <i>old</i> age.</li> <li>• Begins a flat brown macule which grows very slowly, some areas may even regress.</li> <li>• The least malignant type.</li> </ul> <p>4. <u>Acral lentiginous:</u></p> <ul style="list-style-type: none"> <li>• Occurs in <i>palms, soles &amp; beneath the nails</i>.</li> <li>• It has a very poor prognosis.</li> </ul> <p>5. <u>Amelanotic:</u></p> <ul style="list-style-type: none"> <li>• Occurs in <i>eyes, meninges &amp; muco-cutaneous junctions</i> as the anal canal.</li> <li>• It has a poor prognosis.</li> </ul>
MICROSCOPIC PICTURE	<ul style="list-style-type: none"> <li>• Central <i>polyhedral</i> cells with basophilic nuclei.</li> <li>• Peripheral <i>columnar</i> cells arranged in palisade appearance.</li> <li>• No tendency for keratinization but with lymphocytic infiltration.</li> </ul>	<ul style="list-style-type: none"> <li>• Cell nests (epithelial pearls): <ul style="list-style-type: none"> <li>○ Masses of malignant epithelial cells with central keratin plug surrounded by prickle cells.</li> <li>○ Pleo-morphism.</li> <li>○ Prominent keratinization.</li> <li>○ Dermal invasion by atypical epi-dermal cells.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Sheets of highly malignant cells.</li> <li>• Melanin granules may be seen inside the cells.</li> <li>• Even in absence of these granules (amelanotic type), it gives +ve DOPA reaction.</li> </ul>
SPREAD	<ul style="list-style-type: none"> <li>• <i>Direct</i>: to surrounding &amp; underlying structures.</li> <li>• <i>Lymphatic</i>: does not occur.</li> <li>• If draining LNs are enlarged → either 2<sup>ry</sup> infection or epitheliomatous transformation.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Direct</i>: to ...</li> <li>• <i>Lymphatic</i>: to regional LNs.</li> <li>• <i>Blood</i>: late &amp; rare.</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Direct</i>: to ...</li> <li>• <i>Lymphatic</i>: by permeation &amp; embolisation → satellite nodules.</li> <li>• <i>Blood</i>: LLBB.</li> </ul>
	<p>✓ <u>COMPLICATIONS:</u></p> <ul style="list-style-type: none"> <li>• Spread.</li> <li>• 2<sup>ry</sup> infection: meningitis &amp; cavernous sinus thrombosis (cause of death).</li> <li>• Epitheliomatous transformation.</li> <li>• Severe hemorrhage from erosion of a big vessel.</li> </ul>	<p>✓ <u>GRADING:</u></p> <ul style="list-style-type: none"> <li>• <i>I</i>: well differentiated tumors.</li> <li>• <i>II</i>: moderately differentiated tumors.</li> <li>• <i>III</i>: poorly differentiated tumors.</li> </ul>	<p>✓ <u>LNs:</u></p> <ul style="list-style-type: none"> <li>• <i>N<sub>0</sub></i>: no LNs involvement.</li> <li>• <i>N<sub>1</sub></i>: LNs &lt; 3 cm in diameter.</li> <li>• <i>N<sub>2</sub></i>: any LN &gt; 3 cm in diameter.</li> </ul>

D.D.	<ul style="list-style-type: none"> <li>• انظر آخر ورقة.</li> </ul>	<ul style="list-style-type: none"> <li>• Kerato-acanthoma (Molluscum sebaceum):             <ul style="list-style-type: none"> <li>○ Nodular proliferation of squamous epidermal cells.</li> <li>○ The nodule grows rapidly for 6-8 weeks &amp; usually begins to resolve spontaneously.</li> <li>○ It has a central keratin plug.</li> <li>○ It does not invade the surrounding skin.</li> </ul> </li> <li>• BCC.</li> <li>• Ulcerating MM.</li> </ul>	<ul style="list-style-type: none"> <li>• Granuloma or haemangioma.</li> <li>• Pigmented BCC.</li> <li>• Giant benign nevus.</li> </ul>
TREATMENT	<p>✓ <u>Radio-therapy:</u></p> <ul style="list-style-type: none"> <li>• BCC is radio-sensitive.</li> <li>• Contra-indicated in lesions:             <ol style="list-style-type: none"> <li>1. Near the eyes.</li> <li>2. infiltrating cartilage &amp; bone.</li> </ol> </li> </ul> <p>✓ <u>Surgery:</u></p> <ul style="list-style-type: none"> <li>• Excision with 1-2 cm safety margin of surface &amp; in depth + plastic closure of the defect.</li> <li>• <u>Indications:</u> <ol style="list-style-type: none"> <li>1. Small lesions as it is easy to close the defect left behind.</li> <li>2. Radio-resistant lesions.</li> <li>3. Recurrence after radio-therapy.</li> <li>4. Infiltrating cartilage &amp; bone as:                 <ul style="list-style-type: none"> <li>○ Bone will hide malignant cells from the effect of radio-therapy.</li> <li>○ Radiation may cause bone necrosis.</li> </ul> </li> </ol> </li> </ul> <p>✓ <u>Others:</u></p> <ul style="list-style-type: none"> <li>• Cryo-surgery.</li> <li>• Local cyto-toxic 5 Fluro-uracil ointment.</li> </ul>	<p>✓ <u>Radio-therapy:</u></p> <ul style="list-style-type: none"> <li>• Mainly for lesions of the head &amp; neck (especially poorly differentiated tumors).</li> </ul> <p>✓ <u>Surgery:</u></p> <ul style="list-style-type: none"> <li>• Excision with 2 cm safety margin (in the face = 0.5 inch) + plastic closure of the defect.</li> <li>• <u>Indications:</u> <ol style="list-style-type: none"> <li>1, 2, 3 &amp; 4: as BCC.</li> <li>5. Marjolin's ulcer (ulcer on top of burn scar).</li> <li>6. Block dissection of metastatic LNs.</li> </ol> </li> </ul> <p>✓ <u>PROGNOSIS:</u></p> <ul style="list-style-type: none"> <li>• 5 year cure rate 90% with early treatment.</li> </ul>	<ul style="list-style-type: none"> <li>• The only sure method for diagnosis is biopsy &amp; histo-pathological examination.</li> <li>• The lesion should be excised with a safety margin:             <ol style="list-style-type: none"> <li>1. If tumor thickness &lt; 1 mm → 1 cm.</li> <li>2. If tumor thickness 1-4 mm → 2 cm.</li> <li>3. If tumor thickness &gt; 4 mm → 3 cm.</li> </ol> </li> <li>§ If LNs are not clinically involved → FNA or sentinel LN biopsy to ensure that they are free.</li> <li>§ If LNs are involved → radical block dissection.</li> <li>• Metastases are treated by chemo-therapy, isolated limb perfusion chemotherapy, interferon or inter-leukin 2.</li> <li>• Melanoma of the fingers → amputation.</li> </ul>

### ✓ PROGNOSTIC FACTORS of MM:

	Depth of skin invasion Clark's level	Thickness of the tumor Berslow's thickness
Stage I	• Epidermal.	• < 0.75 mm.
Stage II	• Dermo-epidermal junction.	• 0.75 – 1.5 mm.
Stage III	• Superficial papillary dermis.	• 1.5 – 2.25 mm.
Stage IV	• Deep papillary dermis.	• 2.25 – 3 mm.
Stage V	• SC tissues.	• > 3 mm or satellite nodules within 2 cm of the 1 <sup>st</sup> tumor.

#### • D.D. of BCC:

#### 1. Ulcers of face:

##### 1) Malignant:

- BCC.
- SCC.
- Marjolin ulcer.
- Ulcerating MM.

##### 2) Inflammatory:

###### ○ Non-specific:

- Cock's peculiar tumor.
- Kerato-acanthoma.
- Pyogenic granuloma.
- Ulcerating carbuncle.

###### ○ Specific:

- TB of the skin (lupus vulgaris).
- TB of zygomatic bone (ulcerating cold abscess).
- Oriental sore (leishmaniasis).
- Actino-mycosis.
- Herpetic ulcers (very painful minute ulcers).

##### 3) Traumatic:

- Mechanical (physical & chemical).

#### 2. Seborrheic keratosis.

#### 3. Senile keratosis.

#### 4. Bown's disease.