BENIGN & MALIGNANT LESIONS OF THE SKIN
Dr. Qattan's lecture transcript
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* Benign:
	+ Nevus
		- حبة الخال
		- Everyone will have one (junctional)
			* If large , it is congenital melanocytic nevus ( premalignant)
		- Intradermal (with hair coming out of it) : abnormal melanocytes situated inside dermis)
		- Compound (junctional & centrally intradermal)
		- Dysplastic:
			* Color not uniform
			* Edge not well defined
			* Size >0.5 cm
			* CAN TURN to Melanoma
			* Dysplastic nevus syndrome (Autosomal Dominant):
				+ 100s of dysplastic nevi ( you can't excise them all)
				+ Regular screening of nevi:

Size

Change in color

Itching

Bleeding

Elevation in size

* + - Giant hairy nevus:
			* Usually one big nevus
			* Too much Hair like scalp hair
			* 2-3% melanoma
			* If possible, excise it & do skin graft OR  do regular chekup
	+ Fatty tumors  (lipomas)… very common
		- White mature cell (Lipoma (we see most of the time)
			* 99% non syndromal
				+ SUBCUTANEOUS (most common):

Diffuse: no well defined capsule

Localized

* + - * + SUBFACIAL
				+ INTRAMUSCULAR
				+ INTRASYNOVIAL
				+ INTRANEURAL….
			* 1% syndromal (Liposuction is a possible treatment for them)
				+ Familial multiple lipomyomas (painless)
				+ Dercum Disease:

Multiple lipomyomas

Painful

Negative family history

* + - * + Madelung disease:

Multiple symmetric lipoma (shoulder & neck areas most common)

Genetic (Not in Arabs)

It only shows in drinkers

* + - * (Malignant): Liposarcoma:
				+ Usually retroperitoneal
				+ Seen as a mass
				+ Late presentation
		- White immature cell
			* LipoBLAST
			* Infants can have fatty tumors (LIPOBLASTOMAS)
		- Brown fat cell (full of mitochondria)
			* Look brown
			* Babies & hibernating animals
			* Adult develop tumors of remnant (**hiber**inoma (named form**hiber**nating animals)
	+ Vascular tumors (hemangiomas,,,)
		- Hemangioma
			* Born with no lesion
			* Develop Big vascular strawberry lesion
			* Regress (by 4 years & involutes by 7 years) may leave thin abnormal skin
			* Conservative management EXCEPT:
				+ Recurrent bleeding
				+ Mouth
				+ Anal
				+ Eye (to prevent amblyopia if light can't go through)

We give intralesional steroids, if didn't resolve we do surgery

* Vascular malformation (baby born with it)
	+ Capillary: Port wine stain:
		- Comes in face
		- Associated with :
			* Epilepsy: abnormal vessels in brain
			* Glaucoma: abnormal vessels in drainage of the eye (near canal of schlemm in the eye )
			* If Port wine+ epilepsy + glucoma along with trigemenal nerve problems: sturge weber syndrome
		- Treatment: laser >>>color will disappear, coagulate capillary
	+ Venous (cavernous):
		- Swelling
		- Bluish
		- You squeeze it, it will get bigger
		- Get bigger with standing (gravity)
		- Seen in head & neck
		- Treatment
			* Sclerotherapy
			* Surgical incision
	+ Lymphatic
		- Types:
			* Diffuse (in legs) ,, confused with lymphedema
			* Localized (in neck & axilla)  (cystic hygroma)
		- Treatment:
			* Scelerotherapy
			* Surgical incision
	+ Arterial: very rare, pulsating
	+ Arterio-venous fistula, pulsating:
		- Upper limb
		- Pulsating

* Neurofibromatosis (von Recklinghausen disease)
	+ AD (may become a new mutation in the member)
	+ Coming from small nerves of the skin
	+ Multiple schwanoma
	+ Caffe- oleit spots
	+ Gliomas
	+ If a tumor is LARGE, can turn to neurofibrosarcoma)
	+ Type I
		- In chromosome 17
		- **Lisch nodule**(in the iris)
	+ Type, II
		- In chromosome 22
		- **Bilateral acoustic neuroma**

* Malignant: (origin, predisposing, etiology, clinical presentation, classification in clinical, histology, staging of the patient, treatment, prognosis)
	+ Basal cell (Rodent ulcer)
		- Predisposing factor:
			* Sun Exposure is the MOST COMMON CAUSE
			* Syndromic: Nevoid basal cell carcinoma syndrome (Gorlin) Syndrome:
				+ Autosomal dominant
				+ Classic palmer pits
				+ Notches of the ribs
				+ Calcification of falx cerebri
				+ Mandibular tumors (odontogenic keratocysts)
				+ Skin full of basal cell carcinoma
		- Clinical Picture:
			* Most common: noduloulcerative:
				+ rodent ulcer,
				+ edges have telengacasia
				+ Start as Nodule, then ulcerates in the middle
			* Cystic
			* Pigmented (can be confused with melanoma)
			* Morphea (like scar, spreading scar without injury)
				+ Spreads more quickly
				+ Edges not clear
				+ Bigger margin on excision
		- Histological classifcation:
			* Adenoid (looks like glandular)
			* Ulcerative / Noduloulcerative
			* Cystic
		- NO TNM
		- Locally invasive, doesn't metastasize :
			* In some cases,  it rarely metastasize and that's if it goes into squamous metaplasia
		- Treatment:
			* Non surgical (especially in white people living in hot places, because they have small multiple lesions):
				+ Electrodessication
				+ Liquid nitrogen
				+ Cautery

In case of Field change whole skin reddish, angry, tiny spots of cancer, they use

* CO2 laser, to burn the skin (side note: used in old ladies to make them look younger by burning their skin and making tighter skin!!!!)
* 5 Flourouracil (5FU) topical
* Surgical Excision:
	+ Especially if you have a big lesion (even if it's radiosensitive you excise because no need to expose to radiation and you can do simple surgery)
	+ Take 2 mm margin
* Prognosis: excellent
* Squamous cell:
	+ Predisposing factors:
		- Sun
		- Xeroderma Pigmentosa:
			* Autosomal recessive (found in many Saudi families)
			* problem in repair of DNA (p54 system)
			* Treatment:
				+ Excise face skin, then Skin graft from their put (area never exposed to sun)
				+ Leave Saudi Arabia, live in Northern Canada,
			* Prognosis: if exposed to sun regularly, they DIE!!!
		- Actinic keratosis:
			* White farmers get it in back of their hand
		- Margolin Ulcer:
			* Squamous cell carcinoma in chronic wound (burn scar that's contracted, pressure soar)
	+ Clinical classification:
		- Nodule
		- Pigmented nodule
		- Ulcer (margin ulcer)
		- MOST COMMON: keratinic skin lesion: skin horn :: like horn of animal
	+ Histological Classification:
		- Well diffrentiated
		- Moderately differentiated
		- Poorly differentiated :: WORST PROGNOSIS
	+ TNM:
		- Metastasize go to lymph node, then to blood (DIFFERENT FROM SARCOMA)
		- Metastasis:
			* Liver
			* Lung
			* Bone
	+ Management:
		- Check lymph node,
		- Metastatic workup:
			* CXR
			* CT Chest
			* Liver ultrasound / Liver CT
			* LFT

If all negative, check::

* Sentinel lymph node biopsy:
	+ In 99% works well, sufficient
	+ Steps:
		- Inject radioactive substance day before substance,
		- With a probe, You make a mark to the area of accumulation (LYMPH NODE)
		- In day of operation inject the lymphatics with blue dye
		- Remove the tumor with lymph nodes up to the mark you made
	+ Histopathology results:
		- If negative: just remove the tumor
		- If positive: completion lymph node dissection
* In operation, take 0.5 cm margin
* Post op radiotherapy (squamous cell carcinoma is radiosenesitive)
* Prognosis: depends on the TNM stage
* Melanoma (ALWAYS MCQ):
	+ Etiology:
		- Melanocytes
	+ Predisposing factors
		- Sun exposure
		- Xeroderma Pigmentosa
		- Nevi:
			* Large junctinal nevus
			* Dysplastic nevi
			* Giant hairy nevus
	+ Clinical:
		- Superficial spreading:
			* Elevated, tiny
			* Spreads radially
			* Less chance of metastasis, less penetrating of capillaries
		- Nodular:
			* Grows vertical
			* More metastasis
		- Special types:
			* lentigo maligna:
				+ Benign, Premalignant lesion
				+ Brown patch seen in old lady
				+ If get malignant: lentigo malign melanoma: BEST prognosis:
			* Acral lentiginous melanoma:
				+ Hands, feet, genital
				+ Most common presentation of melanoma in Saudi is in feet
				+ Seen more in blacks: (because sole of feet is lighter in color, doesn't protect from melanoma)
				+ ALMOST ALWAYS NODULAR
				+ Subtype: Subangual melanoma;

Black color under nail

Take it seriously

* + Histology:
		- Brislow (according to vertical depth)
			* Brislow 1: <0.75 mm (almost melanoma in situ)
			* Brislow 2: multiply by 2 : **0.75 - 1.5 mm**
			* Brislow 3: 1.5 mm - 3 mm
			* Brislow 4: >3 mm
		- Clark (anatomical)
			* In epidermis: clark 1
			* In upper dermis: papillary dermis : clark 2
			* In Lower dermis: reticular dermis: **CLARK 4**(if in junction between papillary & reticular, class 3)
			* If invades subcuaneous fat: CLARK 5

For prognosis wise: Brislow is more indicative

* TMN
	+ Metastasis:
		- Liver
		- Lung
		- Bone
		- brain
* Management: (RADIO RESISTANT TUMOR)
	+ Check lymph nodes
	+ Metastatic work up
	+ Sentinel lymph node biopsy
		- If positive, completion lymph node dissection
	+ Margain:
		- Brislow 1: 2-3mm
		- Brislow 2: 0.5 cm
		- Brislow 3: 1 cm
		- Brislow 4: 3 cm
	+ May give palliative radio/chemo
* Prognosis: depending on Brislow staging, if early curable, if late, it's deadly