A Tale of a Chump with an Ugly Lumpy Bump

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- MayFlower is a 20-month-old male with a greater than 1 month history of an unusual bruise after bumping his face against his toy chest 4-5 weeks ago.
- He is totally well!
Wow! A very firm reddish-blue nodule that feels like there are several lumps within it.
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• Past medical history is non-contributory
• Physical examination:
  • There is a 2.5 cm. firm reddish-blue nodular lesion on his left upper cheek
  • There is no hepatosplenomegaly
  • He is without any other skin lesions
  • The only test is a normal CBC with a normal differential and normal indices
A close-up view...Wow! A very firm reddish-blue nodule that feels like there are several lumps within it.

There is a “tent” appearance when stretching the skin.
Okay... time to put this one together...

- We have a well child with a lump/bump after well documented accidental trauma.
- As bad as this appears, there is nothing to make us think this is a malignant lesion.
- So, do you have a differential diagnosis for lumps and bumps in childhood?
- Which lump is the most common?
Here is my differential diagnosis (out of order on purpose)

- Fibroma
- Neurofibroma
- Lipoma
- Lymphangioma
- Juvenile xanthogranuloma
- Granuloma annulare
- Mastocytomas
- Malignant tumors (usually sarcomas)
- Epithelial inclusion cyst
- Pilartricoma
- Miscellaneous
Your answer, please...
Answer: Pilomatrixoma
(Calcifying Epithelioma of Malherbe)

• Second most common superficial lump in children after epidermal inclusion cysts
• Is an acquired hamartoma of hair follicle origin (i.e. a non-malignant mutation of hair matrix cells)
• Hard, multilobular papule or nodule with a bluish color
  • Stretching of skin over lesion can give a "tent" appearance
Treatment

- Surgical excision is best

Histology

- Sheets of compact basal cells alternating with “ghost” or “shadow” cells
- Calcification often present
Here is my differential diagnosis (in order of occurrence)

- Epithelial inclusion cyst - 59%
- Pilmatricoma - 10%
- Miscellaneous - 9%
- Fibroma - 4%
- Neurofibroma - 3%
- Lipoma - 3%
- Lymphangioma - 3%
- Juvenile xanthogranuloma - 3%
- Granuloma annulare - 3%
- Mastocytomas - 2%
- Malignant tumors (usually sarcomas) - 1%
Epidermal inclusion cyst (EIC) - epidermal implantation of the epidermis within the dermis
Infected EIC - cyst is filled with keratin debris. There is a smell like rancid cheese.
Milia on the cheek of a child
Lymphocytoma cutis (Pseudolymphoma of Spiegler-Fendt) - a benign inflammatory disorder of the reticuloendothelial tissue
Pyogenic granuloma on the leg and face of two different patients... lesions were friable and bled easily
Syringoma - benign tumors of the eccrine duct that appears as small papules on the lower eyelids
Trichoepithelioma (Brooke’s Tumor) - benign skin-colored appendegeal tumors that appear in late childhood... often inherited as an autosomal dominant trait
Juvenile Xanthogranuloma (JXG) - benign self-limiting lesions characterized red - orange - yellowish papule and nodules. Lesions on the iris must be differentiated from retinoblastoma.
14-year-old female presented with chief complaint of acne. Note facial neurofibroma and multiple macules.
Tuberous Sclerosis: Adenoma sebaceum = angiofibromas
Adenoma sebaceum = angiofibromas
This is not a good story… this is a 3-year-old with the rapid onset and growth of a very hard nodular lesion that was violaceous. A biopsy confirmed our worst fears… a lymphosarcoma
Another bad story... leukemic skin infiltrates
Still another sad story... cutaneous neuroblastoma. A tip off... sometimes the lesions will blanch when stroked
So, here is a quick list of “When should I be worried about a malignancy in superficial skin lesions and other lumps and bumps?"

- Rapid progressive growth
- Ulceration
- Lesion fixed to deep fascia
- Firm and greater than 3cm.
- Occurs in the first 30 days of life
References


  • THIS IS A CLASSIC ARTICLE... you want this one in your files!

• Also Arch Derm 114 Sept. 1978 PP 1363-1365... Association of multiple pilomatrixomas and myotonic dystrophy.
And that is the end of this tale...
Mayflower had a successful surgical removal
and lived happily ever after... as far as I know.