

## NEVUS Melanocitico (lunares)

### Causes:

- congenital or acquired

### Pathogenesis:

- proliferation of altered melanocytes in skin

### Possible risk factors:

- **neonatal phototherapy may be associated with increased melanocytic nevus count in childhood**
  - based on case-control study
  - 18 children ages 8-9 years who had been exposed to neonatal phototherapy compared to 40 nonexposed controls
  - mean nevus count 3.5 vs. 1.45 (median 3 vs. 1)
  - Reference - [Arch Dermatol 2006 Dec;142\(12\):1599](#)

### Complications:

- malignant transformation (rare in child, rare if well-circumscribed, uniform color)
- **melanocytic nevi (simple moles) rarely develop into melanoma**; report based on multiple assumptions, estimated lifetime risk up to 0.03% for 60 years (from age 20 to age 80) in men ([Arch Dermatol 2003 Mar;139\(3\):282](#)), commentary can be found in [BMJ 2003 Jul 5;327\(7405\):filler](#)
- **0.7% risk of melanoma in congenital melanocytic nevi**
  - systematic review of 14 series with at least 20 patients with congenital melanocytic nevi followed for at least 3 years
  - total 6,571 patients with congenital melanocytic nevi followed for (range of means) 3.4 to 23.7 years
  - 46 patients (0.7% overall) developed 49 melanomas, rate of melanomas in individual studies ranged from 0.05% to 10.7%, significantly higher in smaller studies
  - relatively young age reported at diagnosis of melanoma (mean 15.5 years, median 7 years)
  - primary melanoma occurred inside nevi in 33 of 49 cases (67%)
  - melanoma risk strongly correlated with size of congenital melanocytic nevi
  - Reference - [Br J Dermatol 2006 Jul;155\(1\):1](#) commentary can be found in [Am Fam Physician 2006 Dec 1;74\(11\):1930](#)

## **Chief Concern (CC):**

- skin pigmentation

## **History of Present Illness (HPI):**

- increased pigmentation may be transient with sunburn and may not require biopsy to rule out melanoma if return to baseline in 1 month; 4 volunteer with 15 melanocytic nevi exposed to ultraviolet radiation had visual and dermoscopic evidence of increased pigmentation which resolved by 28 days ([Arch Dermatol 1998 Jul;134\(7\):845](#) in [Am Fam Physician 1998 Dec;58\(9\):2105](#))

## **Skin:**

- tan or brown macule, occasionally nodular hyperpigmented lesion, well demarcated, symmetric
- junctional nevus - dark, flat (macule), smooth, 1-2 cm, occasionally hairy, can transform to malignant melanoma (rare before puberty)
- compound nevus - brown-to-black, well-circumscribed, usually < 1 cm, may be elevated (papule), frequently hairy, malignant transformation rare
- intradermal nevus - light-colored (flesh-colored papule), well-circumscribed, < 1 cm, usually hairy, malignant transformation rare
- giant pigmented nevi - brown-to-black, hairy with irregular nodular surface, frequently > 1 square foot of body surface area, arise from dermis and junctional area, 10% malignant degeneration
- congenital nevi often have hair

## **Making the diagnosis:**

- history and physical, biopsy

## **Rule out:**

- malignant melanoma
- freckles (ephelides) - in basal and upper dermis, no malignant potential

## **Testing to consider:**

- biopsy suspicious lesions by excision with margin of normal skin

## Imaging studies:

- **dermoscopic features of acquired acral melanocytic nevi vary**
  - based on dermoscopies of 188 acquired acral melanocytic nevi in 138 patients of white ethnicity in Turkey

### observed dermoscopic patterns

- 58.5% parallel furrow
- 12.2% fibrillar
- 6.4% latticelike
- 6.4% homogeneous
- 5.3% globulostreaklike
- 4.3% reticular
- 2.1% globular
- 3.2% nontypical
- 1.6% pattern suggestive of malignancy
- 39 lesions (20.7%) excised (> 7 mm and dermoscopically suggestive) and found to be benign
- 33 lesions followed up with dermoscopy within 1 year, 24 (73%) had changes in dermoscopic features
- Reference - [Arch Dermatol 2007 Nov;143\(11\):1378](#)

## Pathology tests:

- round to oval cells in clusters or nests, uniform nuclei at dermoepidermal junction + dermis

## Prognosis:

- number of nevi correlate with life risk of melanoma, large type (bathing trunk nevi) have increased risk of malignant transformation
- discussion of changes in melanocytic nevi during pregnancy can be found in [Obstet Gynecol 2005 Oct;106\(4\):857](#)

## Treatment overview:

- no treatment necessary unless melanoma is considered in differential diagnosis - excise any pigmented lesion if change in color, size, or consistency; or pain, satellite nodules, regional lymphadenopathy

## **Surgery:**

- excisional biopsy with normal margin
  - for large lesions - full-thickness wedge biopsy including small area of normal skin
  - for giant pigmented nevi - excision with normal margin in stages or with flap reconstruction
  - for junctional and giant pigmented nevi - total excision unreasonable (average white man has 15-20 nevi)
- congenital nevi should be excised at a young age

**shave excision of benign facial nevi adequate in many cases;** retrospective study of 93 patients who had shave excisions of benign facial melanocytic nevi

- , 76 (82%) patients with 83 nevi returned questionnaires, 23 nevi (28%) recurred at 1 year (41% for hairy nevi), 80% to 86% patient satisfaction rates ([Dermatol Surg 2003 Mar;29\(3\):227](#) in QuickScan Reviews in Fam Pract 2003 Aug 11;28(10):13)
- review of electrosurgery of skin lesions can be found in [Am Fam Physician 2002 Oct 1;66\(7\):1259](#), correction can be found in [Am Fam Physician 2002 Dec 15;66\(12\):2208](#)

## **Prevention:**

- sunscreen use prevents nevi formation in randomized trial of 400 children followed for 3 years ([JAMA 2000 Jun 14;283\(22\):2955](#) in Modern Med 1999 Jun;67(6):46), commentary can be found in JAMA 2000 Dec 13;284(22):2870

## **Reviews:**

- review of treatment of melanocytic nevi can be found in [Dermatol Ther 2005 May-Jun;18\(3\):217](#)