



Ospedale S. Cuore di Gesù
Fondazione IRI
U.O.C. Pediatria-Neonatalogia-Itin



7

CORSO
**ALLERGOLOGIA
ed IMMUNOLOGIA
PEDIATRICA**

23/24/25 MAGGIO 2013

Centro Congressi Fra Pietro Maria de' Giovanni s.p.a.
Ospedale Sacro Cuore di Gesù Fatebenefratelli
BENEVENTO



LA CUTE CHE PARLA

.... e svela la presenza di
malattie sistemiche

**Dott.ssa Irene Berti
UOS di Allergologia
e Dermatologia Pediatrica
IRCCS Burlo Garofolo, Trieste**





IMAGES IN CLINICAL MEDICINE

Henoch–Schönlein Purpura



A 20-YEAR-OLD MAN WAS ADMITTED TO THE HOSPITAL WITH A ONE-DAY history of fever and acute, painful symmetric polyarthritis that involved the wrists, elbows, and ankles. During the next two days, edema and palpable purpura developed over the dorsal aspect of the hands and feet (Panels A and B), as well as on the buttocks and legs. Severe abdominal pain with hematemesis developed, along with an increase in liver aminotransferase levels. Henoch–Schönlein purpura was suspected. Computed tomographic scanning of the abdomen revealed edema of the small



MACCHIE SCURE

Table 1 Syndromes associated with café-au-lait macules

Syndrome	Gene or Locus	Cutaneous Clinical Features	Systemic Clinical Features
NF1	NF1	Multiple café-au-lait (>6), skin-fold freckling, cutaneous and plexiform neurofibromas	Macrocephaly, optic pathway glioma, skeletal dysplasia
NF2	NF2	Café-au-lait macules seen but not a criterion for diagnosis, neurofibromas	Acoustic neuromas, schwannomas, meningiomas, juvenile posterior subcapsular lenticular opacity
Multiple familial Café-au-lait	Unknown	Multiple café-au-lait	Without other stigmata of NF1
Legius (NF-1 like) syndrome	SPREAD1	Multiple café-au-lait, skin-fold freckling	Without other stigmata of NF1
McCune Albright syndrome	GNAS1	Segmental café-au-lait	Precocious puberty, other endocrinopathies, polyostotic fibrous dysplasia
Constitutional MMR deficiency syndrome	MLH1, MSH2, MSH6, PMS2	Multiple café-au-lait	Adenomatous colonic polyps, multiple malignancies (medulloblastoma, lymphoma, glioblastoma)
Ring chromosome syndrome	Chromosomes 7,11,12,15,17	Multiple café-au-lait	Microcephaly, mental retardation, short stature
Leopard/multiple lentigenes syndrome	PTPN11	Café-au-lait, café-noir, lentigenes	Cardiac conduction defects, ocular hypertelorism, pulmonary stenosis, growth retardation, hearing loss
Cowden syndrome	PTEN	Café-au-lait spots, Facial trichilemmomas, soft tissue tumors (lipomas, neuromas)	Cobblestoning of the oral mucosa, gastrointestinal polyps, breast carcinoma, thyroid adenoma and cancer
Banayan-Riley-Ruvalcaba syndrome	PTEN	Pigmented genital macules, Facial trichilemmomas	Oral papillomas, gastrointestinal polyps, Macrocephaly, vascular anomalies

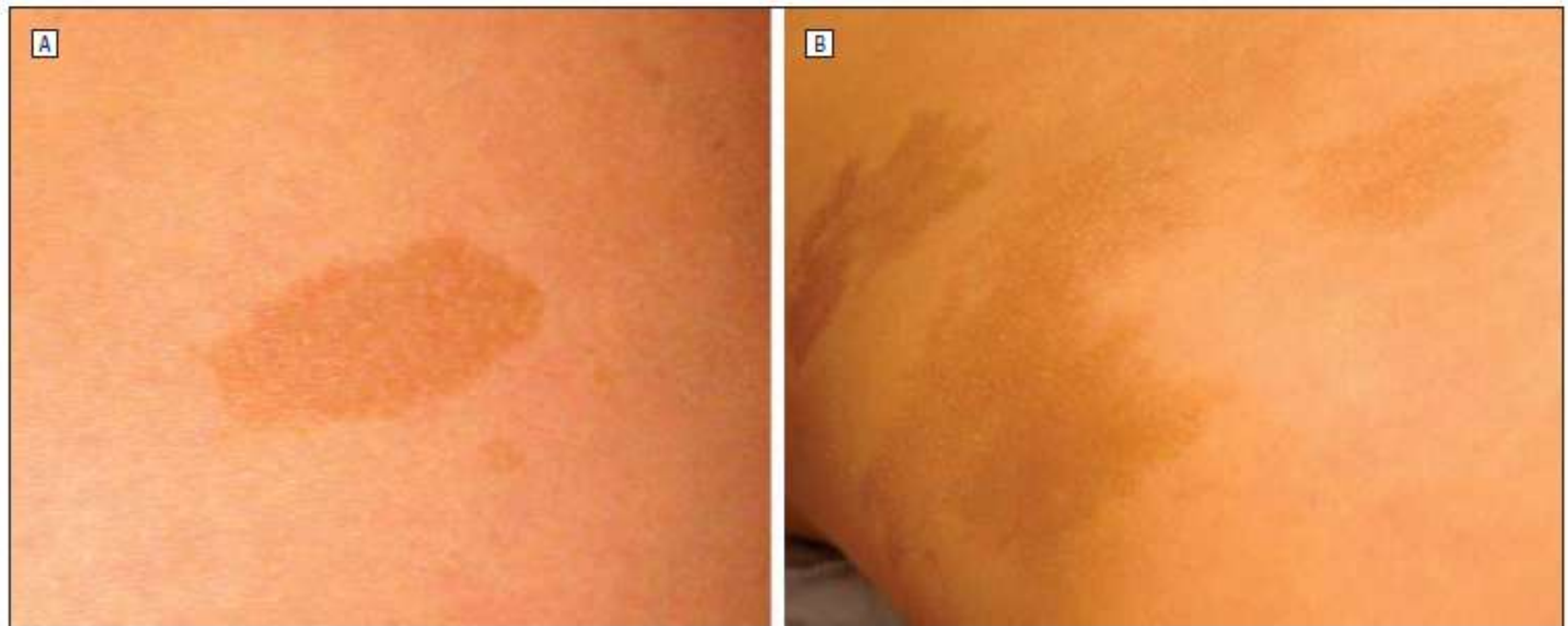
Bambino di 9 mesi

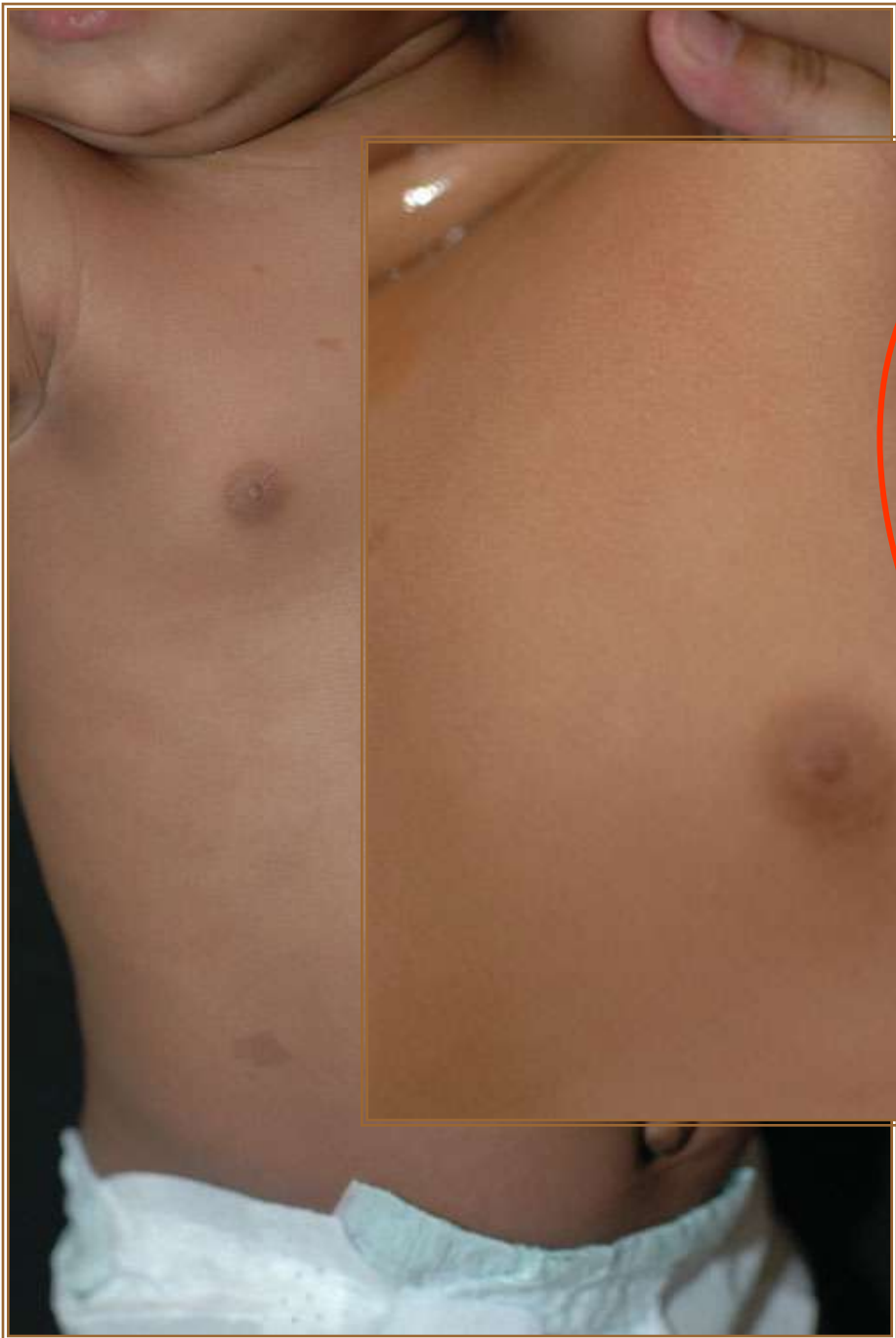






Predictive Value of Café au Lait Macules at Initial Consultation in the Diagnosis of Neurofibromatosis Type 1





CRITERI DIAGNOSTICI PER NF1

- **6 o più CALMs** > 5 mm di diametro in bambini pre puberi e > 15 mm di diametro in soggetti adulti (post puberi)
- 2 o più neurofibromi in qualsiasi sede o un neurofibroma plessiforme
- **freckling ascellare o inguinale**
- 2 o più noduli di Lisch
- glioma del nervo ottico
- una lesione ossea tipica (displasia dello sfenoide, displasia o assottigliamento della corticale delle ossa lunghe, pseudoartrosi)
- Parenti di I grado (genitori, fratelli, figli) secondo I criteri



NUMEROSE
(almeno 6 > 5 mm)

OVALI

MARGINI NETTI

CASUALMENTE
DISTRIBUITE







MOSAICISMO PIGMENTARIO



Lineas de Blaschko



Patrón en tablero de ajedrez



Patrón filoide



Patrón de lateralización



Patrón parcheado sin separación en la línea media

LEOPARD: AUTOSOMICA DOMINANTE

penetranza completa, espressività variabile **12q24.1 PTPN11**

(SHP2 trasduttore citoplasmatico di multipli segnali, coinvolgenti citochine, fattori di crescita, ormoni).



Review

Open Access

Leopard syndrome

Anna Sarkozy*¹, Maria Cristina Digilio² and Bruno Dallapiccola^{1,3}

L lentiggini,
E alterazioni conduzione elettrica ECG,
O ipertelorismo oculare,
P stenosi polmonare,
A anomalie anogenitali,
R ritardo della crescita,
D sordità neurosensoriale





Gastro-colon scopia, video capsula; genetica per Peutz-Jeghers
(gene STK11)
LEOPARD: **gene PTPN11 (12q24.1)**

INCONTINENTIA PIGMENTI: X-LINKED DOMINANTE

GENE NEMO (modulatore essenziale di NF-KB)



IP stadio I: infiammatorio

Vescicole-bolle

soprattutto alle estremità,
o lungo le linee di Blaschko



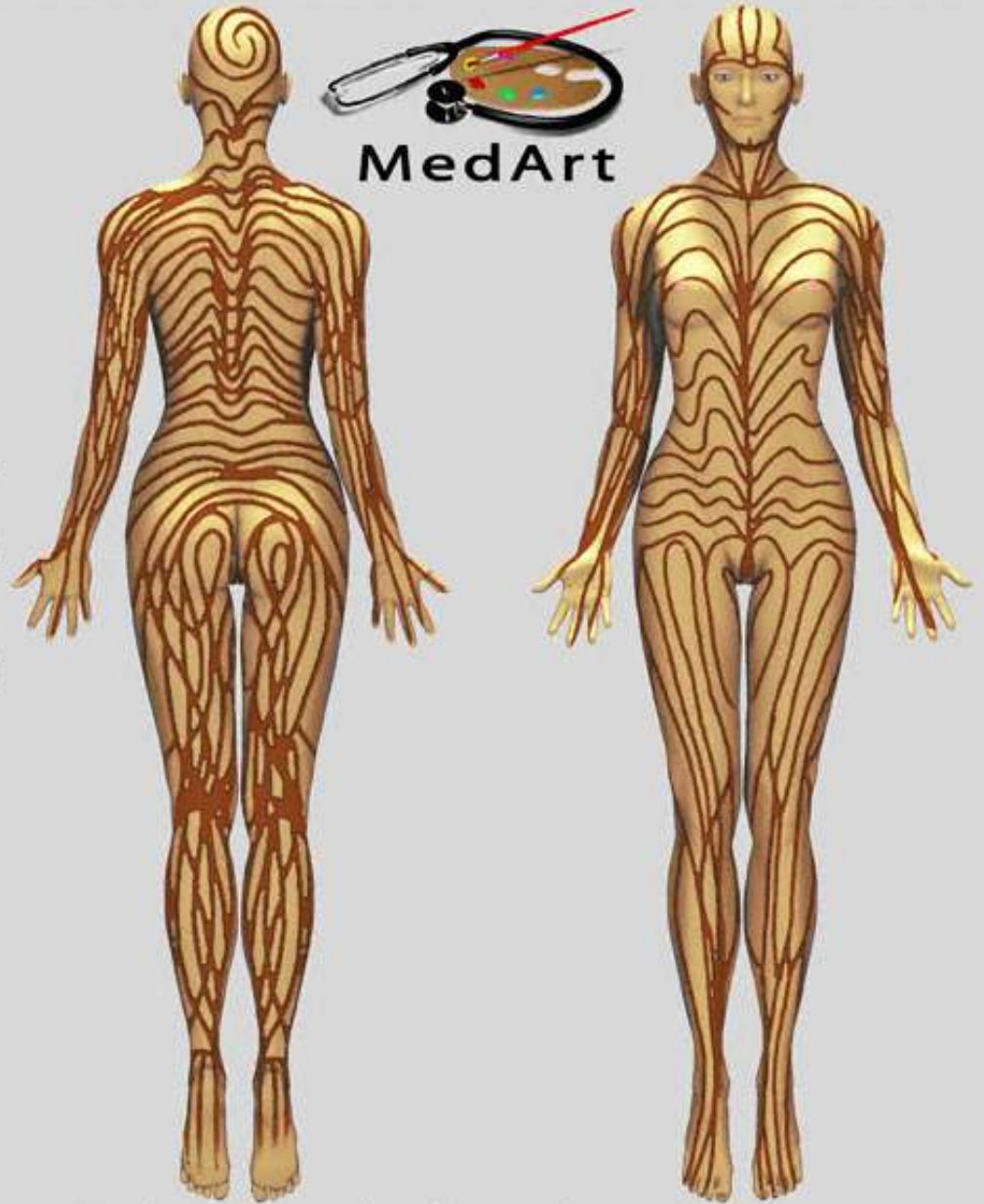
IP stadio II: desquamativo-verrucoso

Squamo croste, verrucose e secche

Arti inferiori, dorso di mani e piedi elettivamente



www.med-ars.it
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Blaschko's lines



IP stadio IV: ipopigmentario-atrofico

Inizia ancora in fase iperpigmentaria

Gambe - polpacci

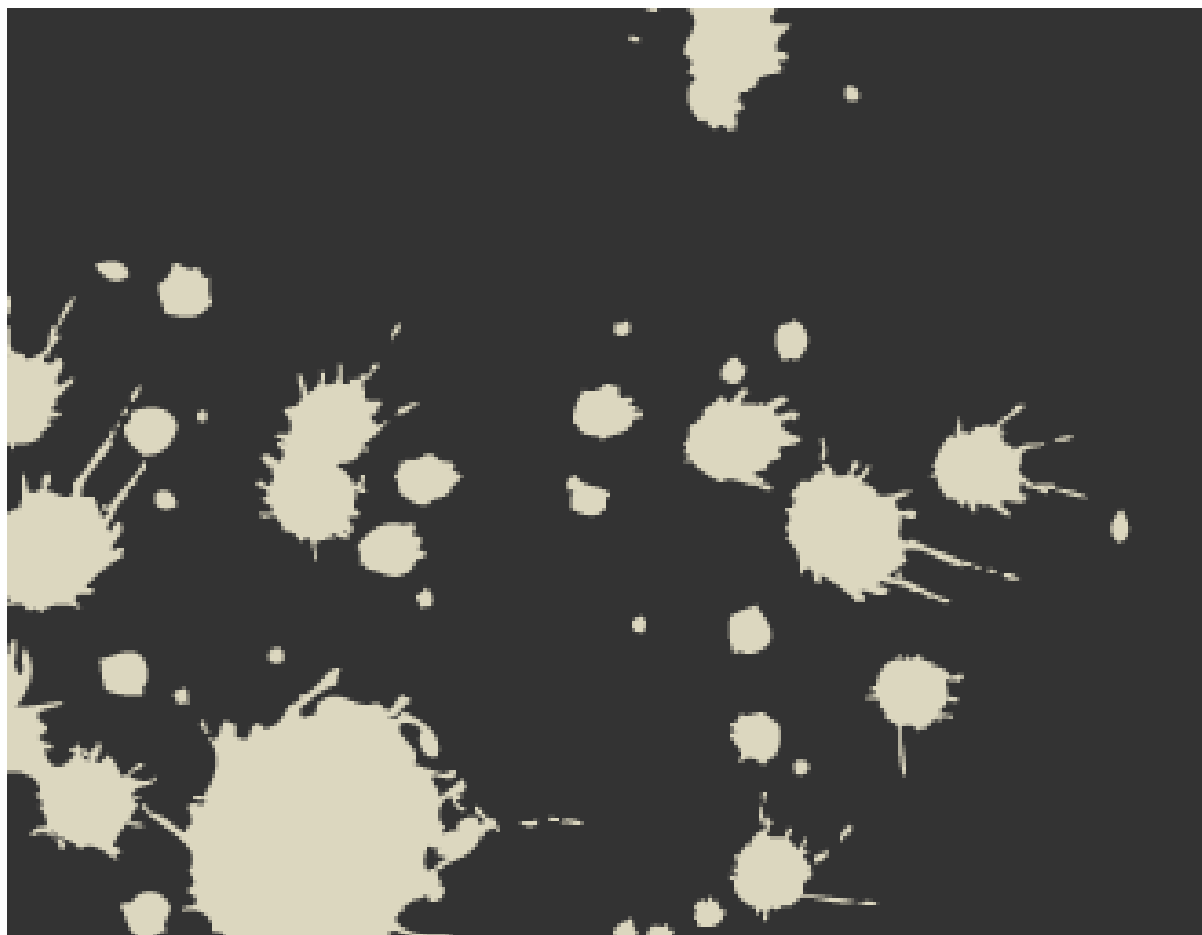
Unica manifestazione nell'adulto

Anomalie di denti e unghie

Ritardo Psicomotorio

Convulsioni

Occhio



MACCHIE CHIARE

CONGENITE

ACQUISITE



- multiple
- alla nascita
- distribuzione casuale

**SCLEROSI
TUBEROSA**

1995

Jessica 6 anni



Mutazione
del gene TSC2

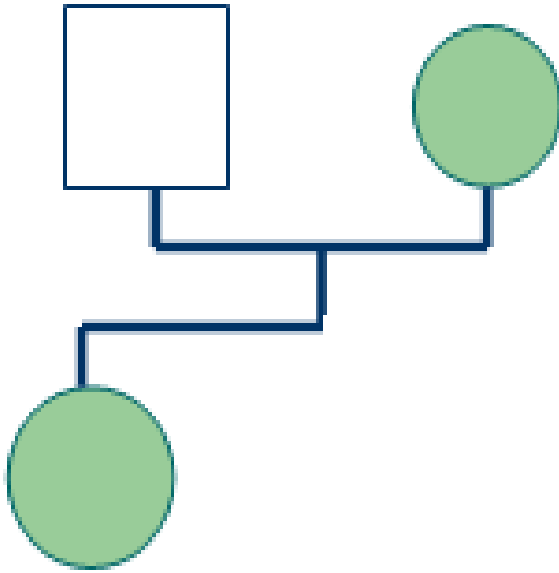


Sclerosi
tuberosa



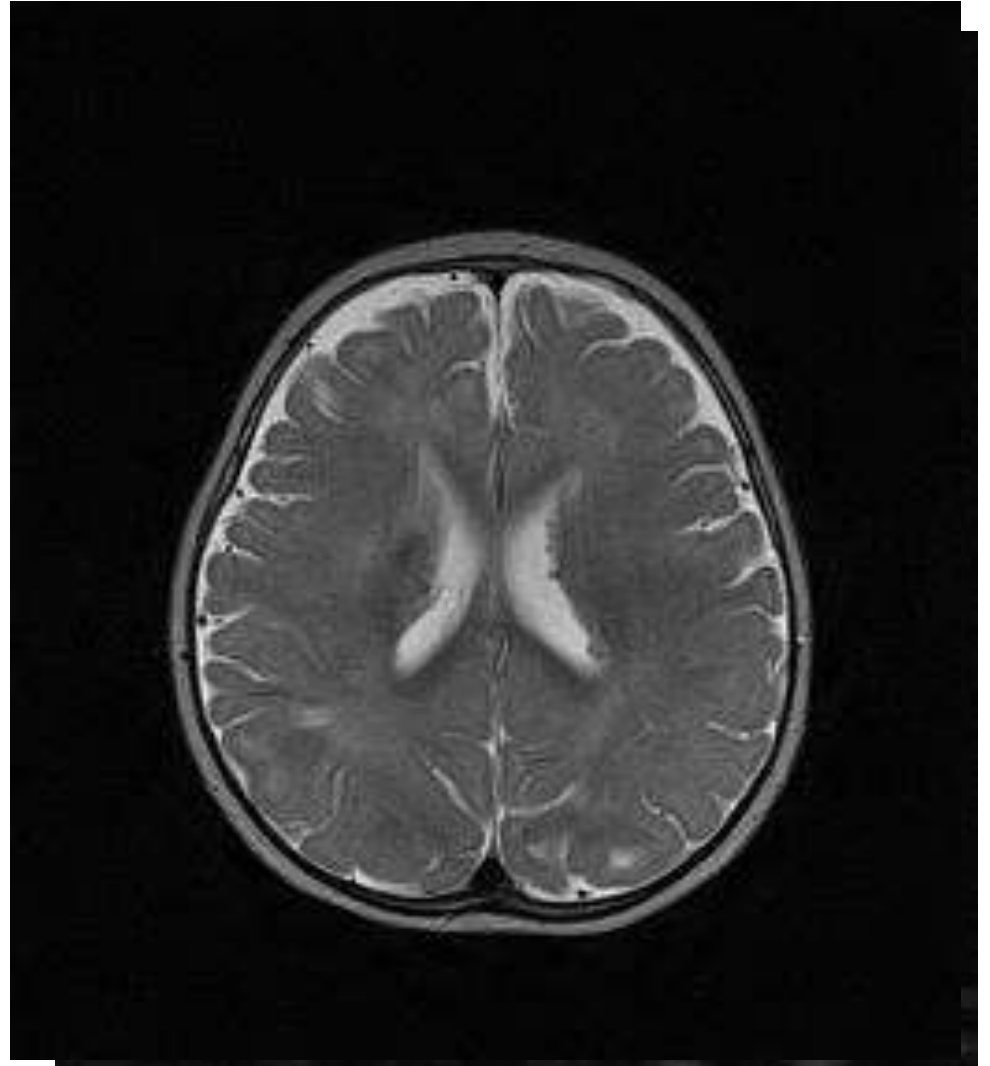
2009

Ma la storia continua con la figlia di Jessica.....



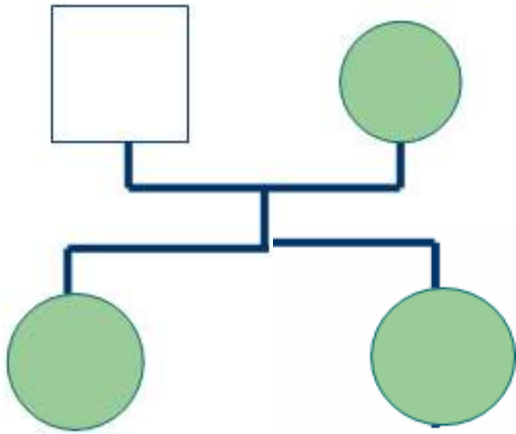
Aurora 4 aa

Mutazione
del gene TSC2

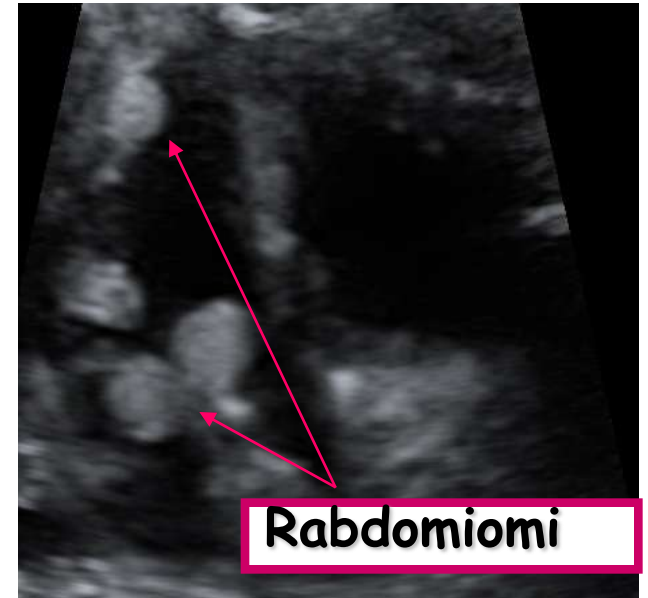


2012

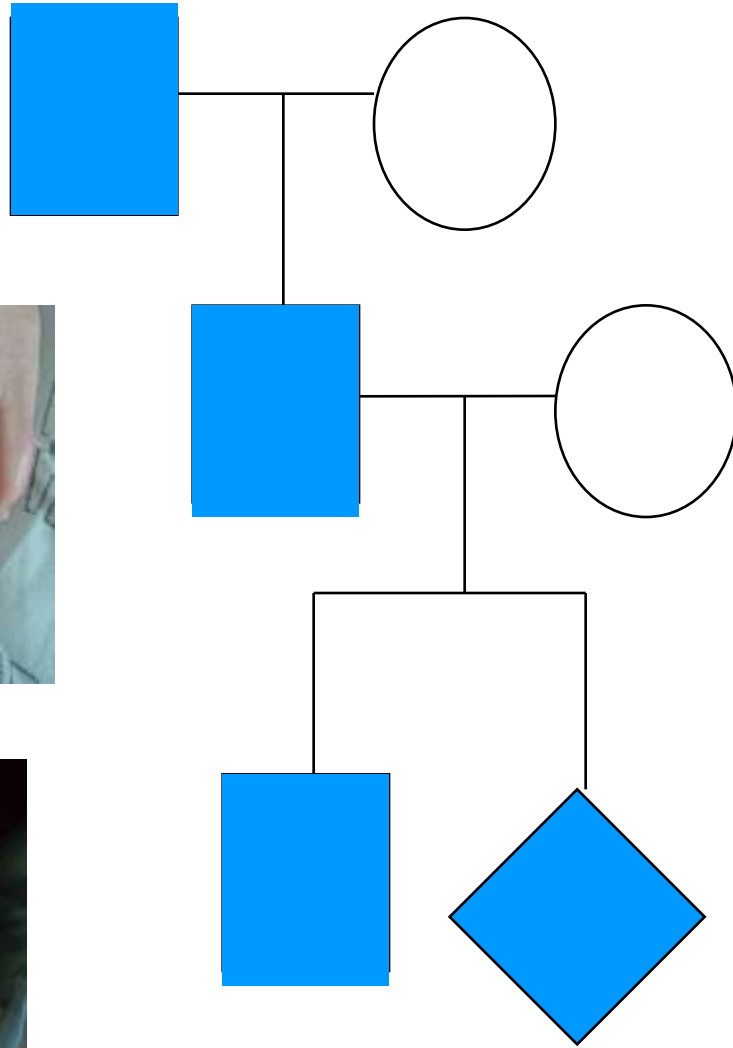
E non è finita qui.....



Alixya



Macchie Epilessia
Ritardo psico-motorio



CONGENITE

Bimba di 23 mesi

Dalla nascita





Piebaldismo

Malattia autosomica dominante

Incidenza: 1:20000

M=F

Assenza congenita di melanociti

Mancata migrazione

Tipico è il ciuffo bianco frontale (altre sedi)

Macule acromiche congenite sulla superficie anteriore del torace, addome

Nessuna terapia se non innesti di cute



CONGENITE

ACQUISITE

VITILIGINE













PITIRIASI VERSICOLOR IN FASE ACROMICA



Pityriasis Versicolor

Contrariamente a quanto generalmente pensano genitori e pediatri, la pityriasis versicolor non è molto frequente in età pediatrica....





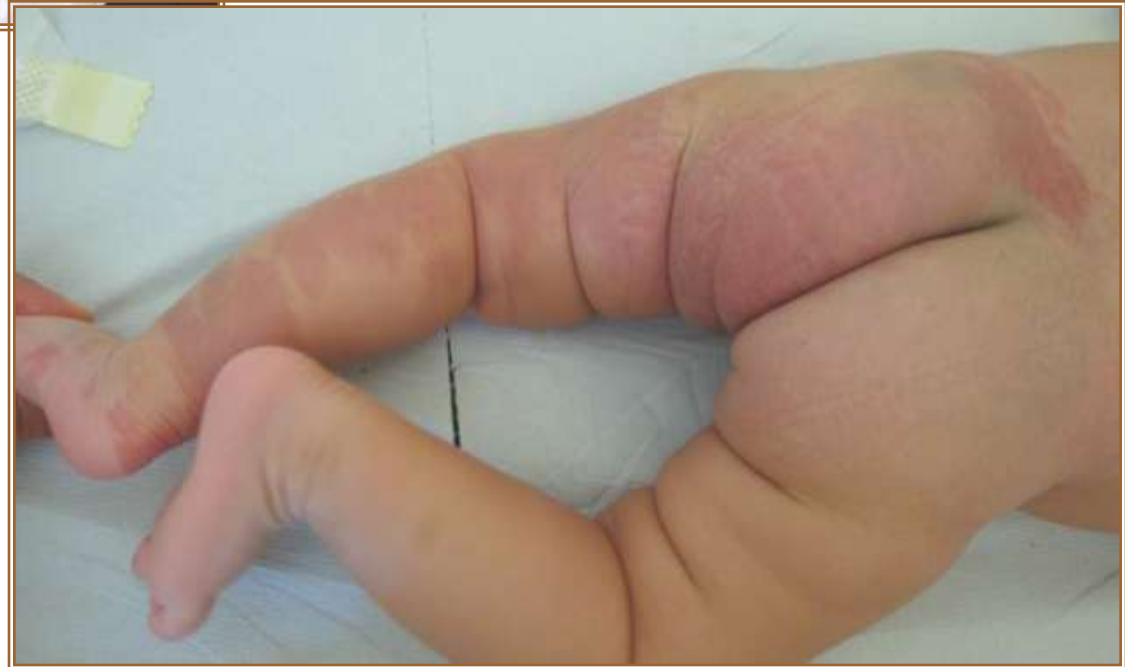
Ovviamente, in casi eccezionali le sedi tipiche dell'adulto possono essere riscontrate anche nel bambino.....



MACCHIE ROSSE



SIMMETRIA DEGLI ARTI



EMANGIOMATOSI MULTIPLA



Diffuse neonatal hemangiomas. A case report with limited visceral involvement.



Da 5-6 a 1000 emangiomi

Attento esame obiettivo

- Torace
- organomegalia
- apparato circolatorio

Ecografia dell' addome

Se positivo e/o se sintomi sistemici

valutazione

polmoni, RMN encefalo, tiroide

Show additional filters

Display Settings: Summary, 20 per page, Sorted by Recently Added

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Article types

- Clinical Trial
- Review
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Text

- availability
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Publication dates

- 5 years
- 10 years
- Custom range...

Species

- Humans

[Clear all](#)

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- [Involution of a large parotid hemangioma with oral propranolol: an illustrative report and review of the literature.](#)

1. Mantadakis E, Tsouvala E, Deffereos S, Danielides V, Chatzimichael A. Case Rep Pediatr. 2012;2012:353812. doi: 10.1155/2012/353812. Epub 2012 Nov 25. PMID: 23227404 [PubMed]

- [Effects of propranolol on the proliferation and apoptosis of hemangioma-derived endothelial cells.](#)

2. Ji Y, Li K, Xiao X, Zheng S, Xu T, Chen S. J Pediatr Surg. 2012 Dec;47(12):2216-23. doi: 10.1016/j.jpedsurg.2012.09.008. PMID: 23217879 [PubMed - in process]

- [Adverse effects of propranolol treatment for infantile hemangiomas in China.](#)

3. Jian D, Chen X, Babajee K, Su J, Li J, Hu X, Xie H, Li J. J Dermatolog Treat. 2012 Dec 10. [Epub ahead of print] PMID: 23216314 [PubMed - as supplied by publisher]

- [Evaluation of Skin Permeation of \$\beta\$ -Blockers for Topical Drug Delivery.](#)

4. Chantasart D, Hao J, Li SK. Pharm Res. 2012 Dec 4. [Epub ahead of print]

Titles with your search terms

The use of **propranolol** in the management of perior [Eye (Lond). 2011]

Low-dose **propranolol** for infantile **haen** [J Plast Reconstr Aesthet Surg....]

Ulcerated infantile **haemangioma** of leg successfull [J Cutan Aesthet Surg. 2011]

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16 free full-text articles in PubMed Central

Propranolol is an effective treatment for airway [Acta Otorhinolaryngol Ital. 2012]

Successful and safe treatment of hemangioma wii [Korean J Pediatr. 2012]

Ulcerated infantile **haemangioma** of leg successfull [J Cutan Aesthet Surg. 2011]

See all (16)...

EMANGIOMI PERINEALI ESTESI



PELVIS Syndrome

Céline Girard, MD; Michèle Bigorre, MD; Bernard Guillot, MD; Didier Bessis, MD



PELVIS Syndrome

Céline Girard, MD; Michèle Bigorre, MD; Bernard Guillot, MD; Didier Bessis, MD

PELVIS

- Perineal hemangioma,
- External genitalia malformations,
- Lipomielomeningocele,
- Vescicorenal abnormalities,
- Imperforate anus,
- Skin tag

Table 2. Summary of Findings Among 11 Patients With PELVIS Syndrome

Finding	No. (%)
Large perineal hemangioma	11 (100)
Digestive abnormalities	8 (72.7)
Urinary tract abnormalities	7 (63.6)
Genital abnormalities	6 (54.5)
Skin tag	5 (45.5)
Neurologic abnormalities	5 (45.5)
Other malformations	7 (63.6)

Febbraio 2010: Roberto 6 mesi. Dalla nascita voluminosa tumefazione della caviglia destra





?

- emangioma?
- malformazione vascolare?
- tumore?









Lossy Medium

Full Size

LIZZI^ROBERTO

093681

20100205

W: 255

L: 128

12



Full Size

LIZZI^ROBERTO

093681 20 Images

20100205

W: 255

L: 128

13



Full Size

LIZZI^ROBERTO

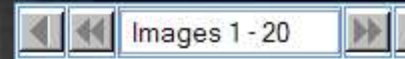
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14



Lossy Medium

Full Size

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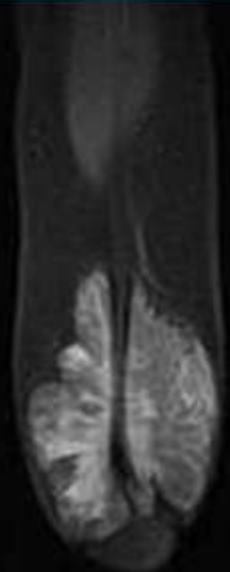
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15



Lossy Medium

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LIZZI^ROBERTO

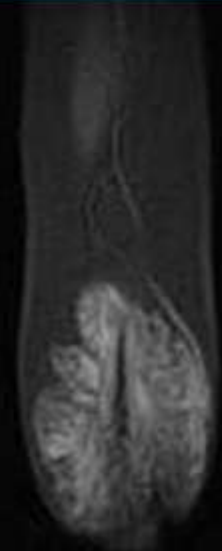
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20100205

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L: 128

16





Aprile 2010: 9 mesi: NON RISCE A METTERE LE SCARPE

Operato a maggio 2010 (9 m): **malformazione vascolare artero-venosa**





BLUE RUBBER BLEB NEVUS SYNDROME

Venous malformations in blue rubber bleb nevus syndrome: Variable onset of presentation

CONDIZIONE RARA

MULTIPLE MALFORMAZIONI VENOSE DI VARIE DIMENSIONI

CUTE E TRATTO GASTROENTERICO

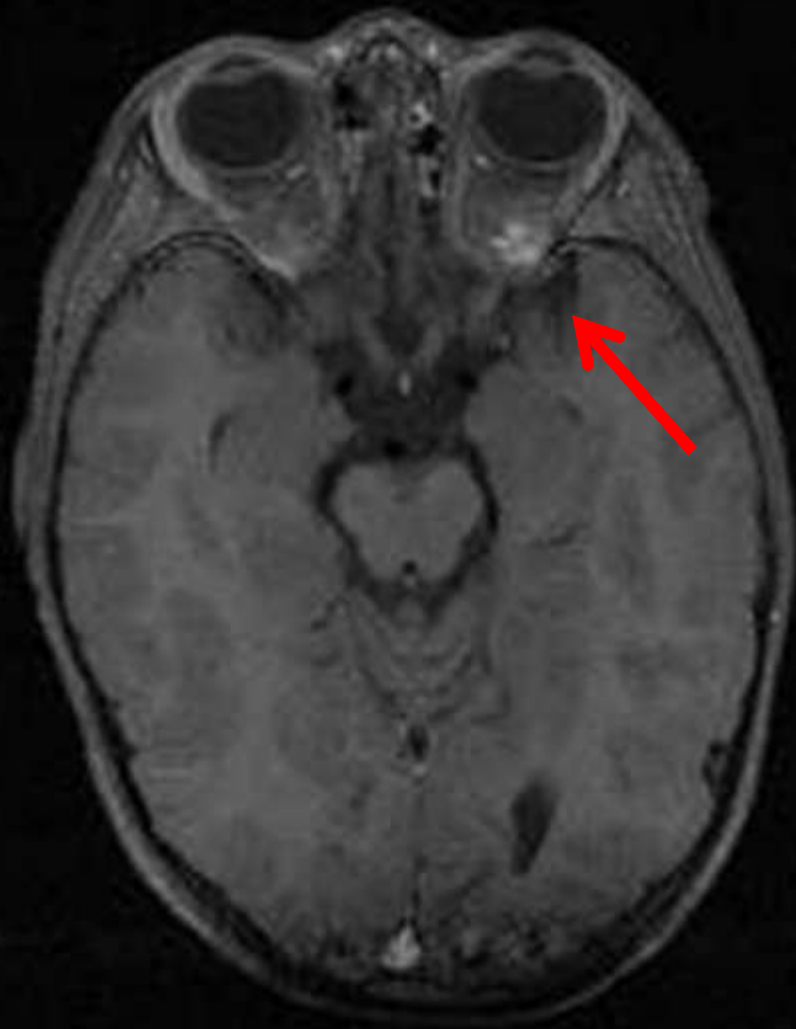
- sulla cute: blu soft, “rubbery” gommose
- sanguinamento gastrointestinale

Venous malformations in blue rubber bleb nevus syndrome: Variable onset of presentation



A Case of Blue Rubber Bleb Nevus Syndrome with Gastrointestinal and Central Nervous System Involvement





Blue Rubber Bleb Nevus Syndrome: Successful Treatment With Sirolimus



Roberto: Hb stabilmente normale.
Dopo 6 mesi netta regressione delle malformazioni
vascolari intestinali

From Skin to Gut



Figure 3. One soft lesion seen with videocapsule endoscopy.

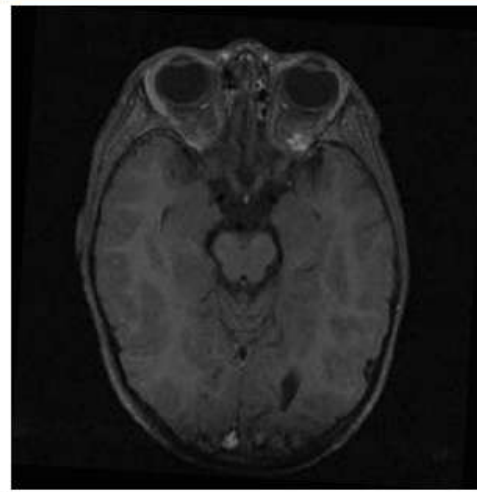


Figure 4. Cerebral magnetic resonance imaging showing a left retrobulbar heterogenic lesion (diameter: 15 × 14 × 11 mm), that shows enhancement after contrast.



Figure 1. Child's ankle lesion, before surgical removal.

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Pietro 12 anni: una diagnosi importante per caso





Verruche

già fatte ripetute crioterapie







Pietro 12 anni: una diagnosi importante per caso

Durante la visita emerge:

1. Notevole impaccio motorio

segno di Gowers

2. affatic

DERMATOMIOSITE



CPK leggermente aumentate



Papule di Gottron



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7^o

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Grazie

Irene Berti
**UOS di Allergologia
e Dermatologia Pediatrica**
IRCCS Burlo Garofolo, Trieste



ACANTHOSIS NIGRICANS

La più comune manifestazione dermatologica associata all'obesità

Placche iperpigmentate, vellutate (rilevate), simmetriche

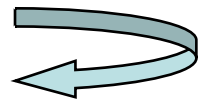
Ascelle, collo, inguine, pieghe in genere

Deriva da una proliferazione anomala dei cheratinociti e si associa

Iperinsulinismo e resistenza insulinica

Virilizzazione:

Aumenta la produzione ovarica di androgeni
irsutismo
acne volgare



5 13 '98

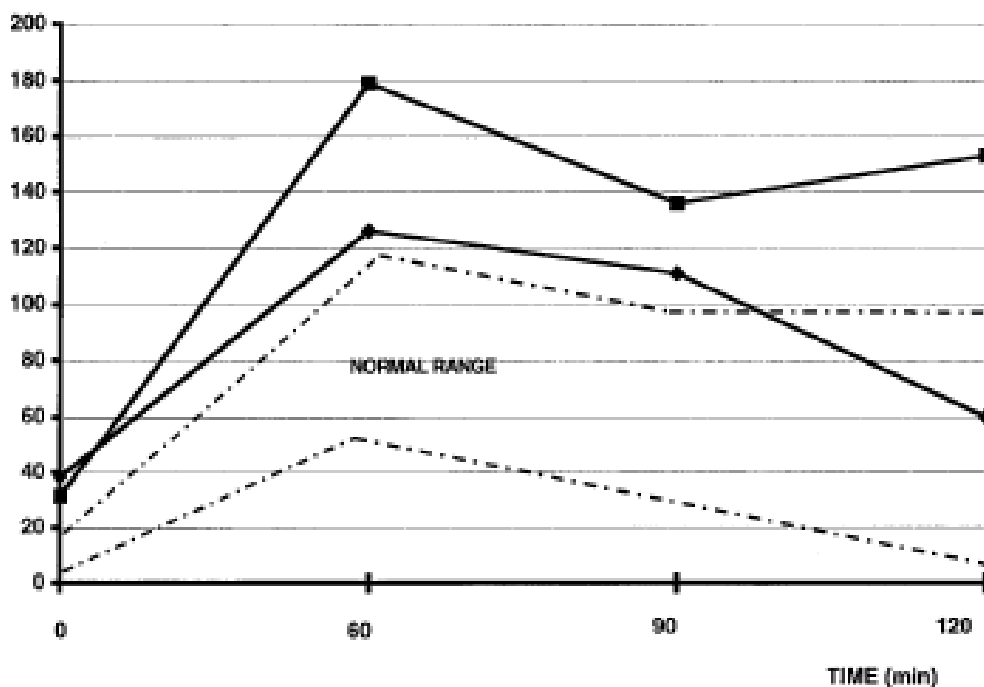


Juvenile Acanthosis Nigricans and Insulin Resistance

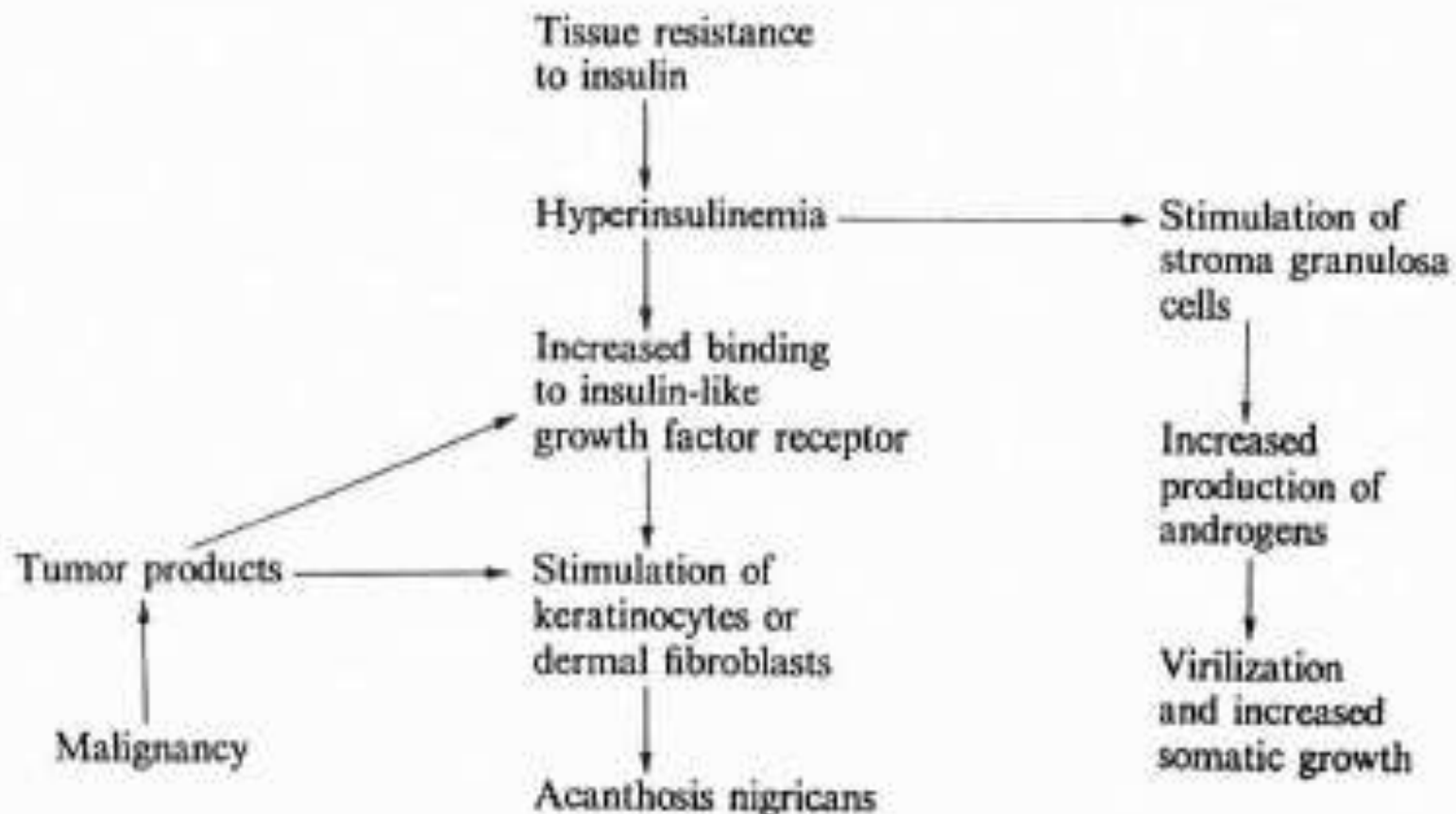
Trinh Hermanns-Lê, M.D., Jean François Hermanns, M.D., and Gérald E. Piérard, M.D., Ph.D.

Department of Dermatopathology, University Medical Center of Liège, Liège, Belgium

INSULINEMIA (mcU/ml)



Juvenile Acanthosis Nigricans and Insulin Resistance



Curr Opin Pediatr. 2004 Aug;16(4):402-9.

Human papillomavirus infections in children.

Silverberg NB.

Department of Pediatric Dermatology, St. Luke's-Roosevelt Hospital Center, New York, New York, USA. nsilverberg@juno.com

Abstract

PURPOSE OF REVIEW: The **Papillomavirus is ubiquitous** 8000 nm DNA virus that causes a variety of clinical disease states in children, commonly referred to as warts. The natural history of warts is spontaneous regression through the development of a complex blend of cell-mediated and humoral immunity. Although spontaneous immunity can develop, as many as one third of children will have persistent human papillomavirus infection beyond 2 years. Therapeutic modalities are manifold, primarily because no therapy is universally effective. The purpose of this review is to update the reader with the latest information on the human papillomavirus and its therapeutics in children.

RECENT FINDINGS: Recently, encouraging research has been conducted in human papillomavirus, including destructive and immunologic therapies. Vaccines tailored to genital human papillomavirus strains are just coming into clinical use.

SUMMARY: Manipulation of the immune system through medications or vaccination will likely help contain human papillomavirus in the future and prevent secondary human papillomavirus oncogenesis of the skin and cervix.

PMID: 15273501 [PubMed - indexed for MEDLINE]

[+](#) **Publication Types, MeSH Terms, Substances**

[+](#) **LinkOut - more resources**

Update: Treatment of Cutaneous Viral Warts in Children

Christina Boull, M.D.,* and David Groth, M.D.†

> 40 studi

DESTRUCTIVE METHODS

Destructive methods cause nonselective damage to infected keratinocytes and surrounding cells. Electrodesiccation and curettage in particular leads to wider zones of injury. Although very useful in the treatment of filiform warts or small individual lesions, it should not be considered a mainstay of therapy in children. Destructive methods tend to have high recurrence rates, and parents' expectations should be set accordingly.

yet no definitive therapy is available.

Salicylic Acid

Salicylic acid remains the best tested wart therapy. A systematic review pooling data from six placebo controlled trials of salicylic acid for warts in adults and children showed a cure rate of 75% compared with 48% in controls (odds ratio 3.91, 95% confidence interval 2.4–6.36) (6). A Cochrane Review (7) comments that “there is certainly evidence that simple treatments containing salicylic acid have a therapeutic effect.”

For optimal effect, warts may be pared down with an emery board or pumice stone and covered with a patch to maintain good contact. Salicylic acid should be used very cautiously on facial warts due to risk of scarring.

In addition to the variety of over-the-counter products available, pharmacists can be directed to compound higher concentration formulations. We find that Aquaphor compounded with 30% to 40% salicylic acid can be quite effective for multiple and hyperkeratotic warts.

available (Fig. 1). As the only therapy thoroughly tested and proven effective is salicylic acid, we recommend starting with this in all patients with nonfacial warts. Parents must be specifically instructed in its proper use, including the importance of soaking and filing lesions between applications.

For warts that fail to respond to salicylic acid, the practitioner must determine what intensity of therapy is appropriate. Patient age and maturity level as well as parent preference must be considered. In most cases, another destructive method should be employed. Cryotherapy for nonfacial warts, cantharidin, and Cantharone Plus are all good options and are readily

Current choices in the treatment of cutaneous warts: a survey among Dutch GP

Sjoerd C Bruggink*, Sanneke C Waagmeester, Jacobijn Gussekloo, Willem J J Assendelft and Just A H Eekhof

Background. GPs apply several treatments for patients with cutaneous warts. Available evidence recommends salicylic acid application.

Conclusions. In contrast to available evidence, most GPs apply cryotherapy as first choice treatment of cutaneous warts. Pragmatic high-quality trials on the effectiveness of wart treatments conducted in primary care might solve this discrepancy between evidence and practice.





Papule di Gottron

Nemo è l'acronimo di modulatore
essenziale di NF-κB

NEMO (IKK-γ) is the regulatory subunit of the inhibitor of [IκB kinase](#) (IKK) complex, which activates [NF-κB](#) resulting in activation of genes involved in inflammation, immunity, cell survival, and other pathways.

Clinical significance [\[edit\]](#)

Mutations in the IKBKG gene results in [incontinentia pigmenti](#),[\[3\]](#) [hypohidrotic ectodermal dysplasia](#),[\[4\]](#) and several other types of immunodeficiencies. Incontinentia Pigmenti (IP) is an X-linked dominant disease caused by a mutation in the IKBKG gene. Since IKBKG helps activate NF-κB, which protects cells against [TNF-alpha](#) induced [apoptosis](#), a lack of IKBKG (and hence a lack of active NF-κB) makes cells more prone to apoptosis.

Interactions [\[edit\]](#)





- propranololo senza effetto

- Secondo intervento a maggio 2011
- malformazione vascolare artero-venosa
- piccola lesione: angiocheratoma

SITUAZIONE LOCALE BUONA





