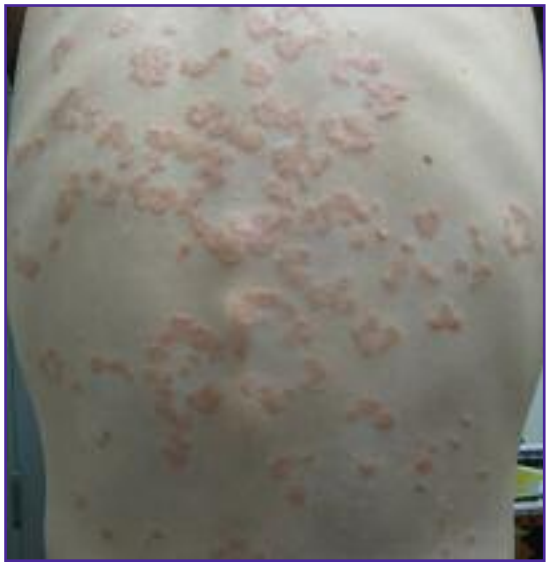
## Case 1



# *Red, Scaly Plaques*

A nine-year-old female presents with red, scaly, well-circumscribed plaques on her trunk that are mildly pruritic. She has recently been unwell with fever and cough.

### Questions

1. What is your diagnosis?
2. What may have triggered this reaction?
3. How would you manage this patient?

### Answers

1. Guttate psoriasis.
2. An immune reaction to a streptococcal infection in someone genetically predisposed.
3. Reassure the patient that the condition typically resolves on its own within a few weeks. Topical steroids and particularly phototherapy are helpful treatments. Instituting oral antibiotic therapy early on if the throat culture is positive can also be beneficial. Keeping the skin well-moisturized is also important.



Provided by: Dr. Benjamin Barankin

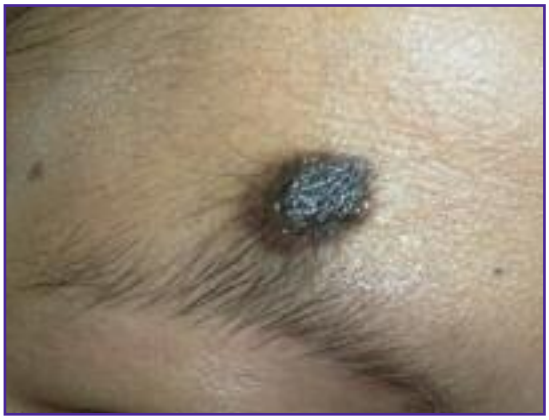
## Share your photos and diagnoses with us!

Do you have a photo diagnosis? Send us your photo and a brief text explaining the presentation of the illness, your diagnosis and treatment and receive $25 per item if it is published.

*The Canadian Journal of Diagnosis*
955, boul. St. Jean, Suite 306
Pointe-Claire, Quebec H9R 5K3

Email: diagnosis@sta.ca
Fax: (888) 695-8554

## Case 2



# *A Dark Lesion*

A five-year-old boy presents with a darkly pigmented lesion on the right side of his forehead. The lesion has been present since birth.

### Questions

1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

### Answers

1. Congenital nevomelanocytic nevus (CNN).
2. CNN are present either at birth or within the first few weeks of life. They are distinguished from the acquired ones by their larger size, much fewer in number per patient and by their more varied architecture and morphology.
3. CNN are classified as small (< 1.5 cm), medium (1.5 cm to 19.9 cm) and giant (> 20 cm) according to their expected greatest diameter in adulthood. The "watch and wait" approach is usually adopted for small- and medium-sized CNN.

   Giant CNN are of special significance because of their predisposition to the development of melanoma. Surgical removal of the giant CNN is indicated in the presence of leptomeningeal melanosis. In the absence of leptomeningeal melanosis, some authors recommend prophylactic excision of the lesion *in toto*, with the excision carried to the deep fascia. Other authors recommend superficial excision with regular follow-up. A conservative approach with serial photography of the nevus and follow-up every six months for five years and every 12 months thereafter has also been advocated.

Provided by: Dr. Alexander K. C. Leung; and Dr. James C. W. Kong

Case 3

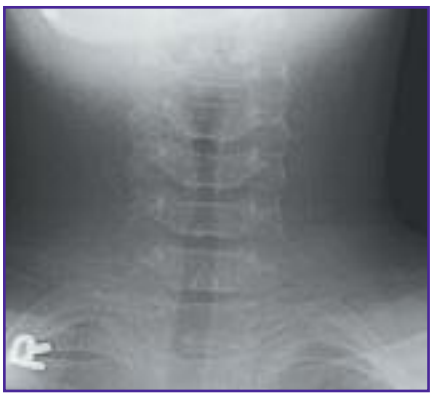


Figure 1. Anteroposterior view.

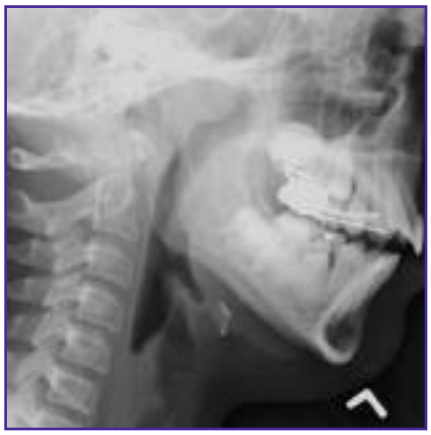


Figure 2. Lateral view.

# *Inspiratory Stridor*

Barry is a 13-year-old boy with a history of motor vehicle collision and intubation for nine days. Two weeks after extubation, he presents with progressive inspiratory stridor, aggravated by exertion. There is no hypoxemia, fever or cough. A flexible laryngoscopy is normal.

## Questions

1. What is the diagnosis?
2. What is the most likely cause?
3. How is this condition managed?

## Answers

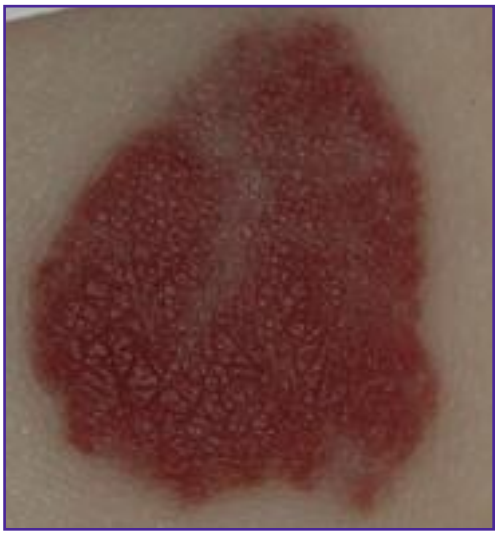
1. Subglottic stenosis (Figure 1) with a granuloma (Figure 2).
2. Approximately 90% of acquired subglottic stenoses are caused by trauma from endotracheal intubation.[1] Long-term intubation causes subglottic stenosis in 1% to 9% of all intubated children[2] by inducing mucosal edema and ulceration, pressure necrosis and healing with granulation tissue.[3]
3. Treatment with oral then inhaled corticosteroids will likely decrease the severity of acute subglottic stenosis. Most granulomas can be managed conservatively. However, an unresponsive patient should undergo rigid bronchoscopy to assess the severity of stenosis. Moreover, gastric acid reflux encourages the vulnerability of laryngeal mucosa to injury and should be considered in the management algorithm.

   In our case, the patient became completely asymptomatic after a five-day course of oral prednisolone elixir (1 mg/kg q.d.) followed by two bi-daily puffs of fluticasone for three weeks.

References
1. Holinger PH, Kutnick SL, Schild JA, et al: Subglottic Stenosis In Infants And Children. Ann Otol Rhinol Laryngol 1976; 85(5 Pt.1):591-9.
2. Cummings CW: *Otolaryngology--Head & Neck Surgery*. Fourth Edition. Elsevier Mosby, Philadelphia, Pa., 2005. p.4269.
3. Liu H, Chen JC, Holinger LD, et al: Histopathologic Fundamentals Of Acquired Laryngeal Stenosis. Pediatr Pathol Lab Med 1995; 15(5):655-77.

Provided by: Dr. Sami P. Moubayed; and Dr. Lily H. P. Nguyen

## Case 4



# *An Erythematous Patch*

This five-month-old infant presents with a 2 cm, flat, erythematous patch on her right upper arm. The lesion was noted at birth and her mother reported that it had changed in colour, from a deep purple to bright red, but had not changed in size.

### Questions

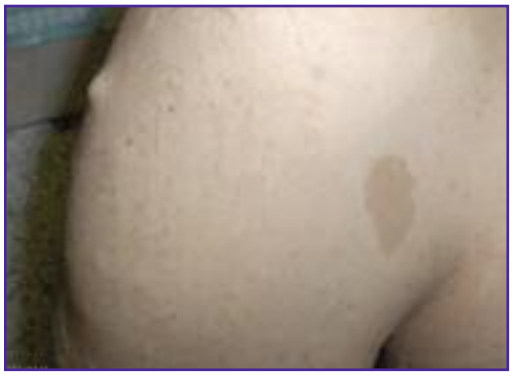
1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

### Answers

1. Hemangioma.
2. Hemangiomas are benign vascular lesions which present at birth or shortly after. They are seen in approximately 2.6% of newborns and are more common in females and premature infants. The lesions are typically pink to red in colour and 2 cm to 5 cm in diameter. However, lesions can grow up to 20 cm and deeper lesions are often blue or purple. Hemangiomas will proliferate in the first year of life, followed by involution by two-years-of-age or three-years-of-age in most cases. Natural history is one factor that differentiates hemangiomas from other vascular abnormalities of infancy such as port-wine stains, salmon patches or arteriovenous malformations.
3. Hemangiomas typically resolve spontaneously. By 10-years-old, there is often no trace of the lesion. Lasting skin changes are minor but can include skin atrophy or depigmentation. Treatment may be necessary for hemangiomas located in areas where they may cause obstruction, such as the face or near the genitourinary tract. In these cases, intralesional steroids, systemic steroids, interferon, pulsed dye laser, cryotherapy or embolization may be considered and referral is recommended.

Provided by: Aimee MacDonald; and Dr. Richard Langley

## Case 5



# *Two Different Lesions*

This 38-year-old gentleman recently immigrated to Canada and presented to his new GP with a few years history of recurring episodes of generalized sweating, sever headache and a feeling of high anxiety. He has poorly controlled BP in spite of being on ramipril, nifedipine and atenolol. He was seen by many doctors for his condition and was given different diagnoses. He has these skin lesions which have been there as long as he can remember.

### Questions

1. What do you think he might be suffering from?
2. What is the name for the two skin lesions he has?
3. What is the condition which we should consider?

### Answers

1. He has typical symptoms of pheochromocytoma which is a neuroendocrine tumour of the adrenal medulla (originally in the chromaffin cells), or extra-adrenal chromaffin tissue that failed to involute after birth and secretes excessive amounts of catecholamines, usually epinephrine and norepinephrine. The classical symptoms of pheochromocytoma are attacks of sweating, headaches, anxiety and increased BP.
2. The front skin lesion on the arm is a spot that is flat, sharply demarcated, evenly pigmented, more or less oval, with long axis situated along a cutaneous nerve tract.

   These kinds of spots are medium brown in colour, which is reflected by their name *café-au-lait* (means "coffee with milk" in French). They are usually present at birth, but may arise later in the first few years of life. The lesion on the back of the arm is a neurofibroma.
3. Neurofibromatosis is the condition which we think of and they are genetic disorders of the nervous system that primarily affect the development and growth of neural cell tissues. The disorder causes tumours to grow on nerves and produce other abnormalities such as skin changes and bone deformities.

   Having one to three *café-au-lait* spots is quite common and is present in as many as one in five healthy children, however having many (at least six spots > 5 mm, the greatest diameter before puberty, or at least six spots of > 15 mm after puberty) is one of the criteria needed to diagnose neurofibromatosis. Dx

Provided by: Dr. Hayder Kubba