EM CASE OF THE WEEK.

BROWARD HEALTH MEDICAL CENTER
DEPARTMENT OF EMERGENCY MEDICINE

BROWARD HEALTH
Care Warriors

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Henoch Schonlein Purpura

An 8-year-old male with no past medical history presents to the ED with a rash on the bilateral lower extremities for 3 weeks. The rash is not pruritic and is accompanied by intermittent ankle edema and arthralgia. He has never experienced these symptoms prior to this episode. He denies fever, hematuria, exposure to allergens/insect bites, and recent travel. Mom notes that he complained of some abdominal pain 3 weeks ago when the rash was first noticed, but the abdominal pain has since resolved. Patient is afebrile and vitals are within normal limits. On physical exam, patient has palpable purpuric lesions of the bilateral lower extremities below the inguinal creases along with mild edema of the ankles and full, pain-free range of motion of the ankles. Which of the following is the most appropriate initial treatment for this patient's condition?

A. Ibuprofen as needed for arthralgia

B. Prednisone 5 mg daily for 10 days

C. Amoxicillin-clavulanate 15mg/kg BID for 10 days

D. Bilateral casting of the lower extremities with no weightbearing x 3 weeks

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The most common symptom present in children is palpable purpura, as shown above.

Henoch Schonlein Purpura clinical manifestations can include:

1.) **Palpable purpura of the lower extremities**
2.) **Abdominal pain**
3.) **Arthralgias/arthritis**
4.) **Renal manifestations**

EM Case of the Week is a weekly "pop quiz" for ED staff.

The goal is to educate all ED personnel by sharing common pearls and pitfalls involving the care of ED patients. We intend on providing better patient care through better education for our nurses and staff.

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The correct answer is A. The treatment for Henoch Schonlein Purpura is supportive care which may include NSAIDs for arthritis/arthralgias. For patients presenting with signs of dehydration secondary to abdominal pain, IV hydration should also be considered.

Discussion

Henoch Schonlein Purpura is a vasculitis caused by immunoglobulin A. It is the most common vasculitis in children and is primarily a disease of children. The disease is self-limited and in most children will not result in any long-term problems. The most feared complication of the disease is renal involvement.

Classically, the presentation involves palpable purpuric lesions of the lower extremities combined with abdominal pain and arthralgias. HSP is an immune-mediated disease that affects the blood vessels. The exact cause of HSP is unknown. However, about one-half of cases of HSP are reported to follow an infection, leading to the theory that a bacterial or viral agent may be to blame.

In patients with Henoch-Schonlein Purpura, immune complexes of immunoglobulin A are deposited in small blood vessels. This inflammation within the blood vessels of the skin causes the characteristic 'palpable purpura' lesions of Henoch Schonlein Purpura.

The average age of onset of Henoch Schonlein Purpura is 6-7 years old; however, cases have been reported in children much younger as well as in adults. Approximately 74% of patients with Henoch Schonlein Purpura present with purpura, with about 15% complaining of arthritis/arthralgias and another 12-17% complaining of abdominal pain (Trapani et al 2005). Renal involvement is reported in 20-54% of children, but appears to be more common in older children and adults. Most commonly, renal involvement presents with hematuria. Gastrointestinal complications of intussuception have also been reported with Henoch-Schonlein Purpura.

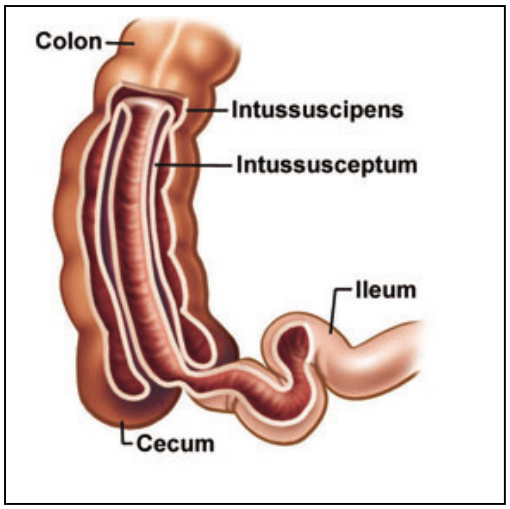

Diagram of Intussuception
Source: YourSurgery.com

Treatment

The treatment of Henoch Schonlein Purpura is supportive. For the majority of patients, this will mean NSAIDs or Tylenol for pain relief of arthralgias and edema. The rash is non-pruritic, therefore no topical steroids, creams, or other treatments have utility. The course of the disease may last for several weeks, and it is not unusual for the rash to persist for 4-6 weeks before resolving.

There is some controversy over the use of glucocorticoids in treating the symptoms of Henoch Schonlein Purpura and in shortening the course of the disease. However, there is no definitive evidence that steroids are effective at either. For patients who are experiencing severe abdominal discomfort and are unable to keep down fluids, IV hydration and admission to the hospital may be indicated. Patients with renal involvement are treated for nephritis only in the presence of marked renal function impairment or proteinuria. There is no standard agreed upon treatment regimen for renal involvement.

For a list of educational lectures, grand rounds, workshops, and didactics please visit ***BrowardER.com*** and **click** on the ***"Conference"*** **link**.

All are welcome to attend!

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Clinical criteria for diagnosing Henoch-Schonlein Purpura:

AT LEAST TWO OF THE FOLLOWING:
Palpable purpura;
Age ≤ 20 years at disease onset;
Abdominal pain or gastrointestinal bleeding;
Vessel wall granulocytes on biopsy.

Diagnostic Criteria	Description
Purpura (mandatory)	Purpura or petechiae with lower limb predominance
PLUS ONE OF THE FOLLOWING:	
Abdominal pain	Diffuse and colicky
Histopathology	Leucocytoclastic vasculitis or proliferative glomerulonephritis with predominant IgA deposit.
Arthritis or arthralgia	Acute onset joint pain or swelling.
Renal involvement	Proteinuria or haematuria.

Source: http://jscr.oxfordjournals.org/content/2012/4/9

Take Home Points

- Henoch Schonlein Purpura is a self-limited disease treated in uncomplicated cases with supportive care.
- The rash of Henoch Schonlein Purpura may persist for up to 4-6 weeks and recurrence may occur within a few months after the first episode.
- Henoch Schonlein Purpura is an autoimmune vasculitis and therefore is not transmissible. Affected children may attend school and all other activities without worry of spreading Henoch Schonlein Purpura.
- There is no conclusive evidence that glucocorticoids shorten or improve the course of Henoch Schonlein Purpura. As such, they are not recommended as routine treatment for uncomplicated cases.

ABOUT THE AUTHOR

This month's case was written by Rachel Volke. Rachel is a 4th year medical student at the FIU Herbert Wertheim College of Medicine. She did her emergency medicine rotation at BHMC in September 2016. Rachel plans on pursuing a career in Internal Medicine after graduation.

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