Kawasaki disease

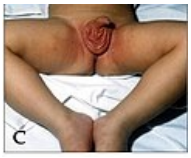
Mucocutaneus lymph node syndrome otherwise known as **Kawasaki disease** is a Vasculitis unknown etiologic. It causes multisystem inflammatory disease targeting small and medium size arteries, leading to a creation of aneurysms.The disease targets mainly children up to the age of 5 with a maximum between second and third year of age. The highest incidence is in Japan.[1] Asian children are affected 6 times more often than Caucasian ones. In the Czech Republic the incidence is guessed to be 1.6/100 000 children up to 5 years.[2]

Clinical picture

Bilateral, non-exudativ conjunctival injection

Changes to mucouses - red and swollen lips with vertical cracks and haemorrhaging, raspberry tongue

Erythema and tough swelling of hands and feet + swelling of PIP hand joints



Erythematous exanthema affecting perineum

Acute phase

- Sudden fevers (over 40°C);
- bilateral non-purulent conjunctivitis;
- changes to mucous (dry, cracked lips, erythema of buccal mucosa and strawberry tongue);
- cervical Lymphadenopathy (more than 1,5cm in diameter) – in 70% of cases[1];
- erythema and tough swelling of hands and feet + swelling of PIP hand joints[2];
- polymorphic exanthem mostly in inguinal region and on thorax- in 80% of cases[1];
- symptoms of acute myocarditis (sinus tachycardia, gallop rhythm, weak heart sounds)[2];
- other: stomach pains, gallbladder hydrops, pleocytosis in CSF, arthritis (middle size and large size joints);
- lasts 1–2 weeks[1].

Subacute phase

- Desquamation of skin (mainly of fingers);
- thrombocytosis(as much as 10^{12}/liter)[2];
- creation of aneurysms of coronary arteries - risk of Sudden death;
  - risk factors: prolonged fevers, prolonged elevation of inflammation markers, age under 1year, male sex;
- lasts till the fourth week[1].

Recovery phase

- From disappearance of clinical symptoms to decline of inflammation markers to normal (usually 6.-8. weeks from the first symptoms);
- the Beau's lines can appear on nails during this phase [1].

Diagnostics

- Exclude other causes of fever (infection);
- Hemoculture, cultivation of urine, thorax X-RAY;
- heightened inflammation markers, thrombocytosis;
- Lumbar puncture (to exclude infection) – pleocytosis;
- echo – evidence of aneurysms of coronary arteries[1].

Diagnostic criteria

- Fever lasting longer than 5 days and minimally 4 of the following:
  - bilateral non-purulent conjunctivitis;
  - reddened, dry cracked lips, raspberry tongue, ...;
  - peripheral erythema, peripheral edema, pealing of skin on fingers, generalized desquamation;

- polymorphic exanthema on the abdomen, the thorax and the area of genitals;
- cervical lymphadenopathy (over 1,5 cm in average)[1].

Treatment

- i. v. imunoglobulin (IVIG);
- Acetylsalicylic acid (Aspirin) in anti-inflammation dose (80–100mg/kg/den) in acute phase and in antiaggregating dose (3–5mg/kg/den) in other phases[1].

References

Related articles

- Systemic vasculitis

Reference

1. KLIEGMAN, Robert M. – MARCDANTE, Karen J. – JENSON, Hal B.. *Nelson Essentials of Pediatrics*. 1. edition. China : Elsevier Saunders, 2006. 5; pp. 430-432. ISBN 978-0-8089-2325-1.
2. JEHLIČKA, Petr – LÁD, Václav – SEDLÁČEK, Dalibor. Kawasakiho syndrom. *Pediatrie pro praxi* [online]. 2008, y. 9, p. 12-14, Available from <http://www.pediatriepropraxi.cz/artkey/ped-200801-0003.php>. ISSN 1803-5264.

External links

- Podcast o Kawasakiho nemoci (http://kardioblogie.blogspot.com/2012/12/podcast-5-dalsi-exkurze-do-pediatrie.html)
- DermNet Kawasaki disease (https://www.dermnetnz.org/topics/kawasaki-disease/)
- Kawasaki disease - video na youtube.com (https://www.youtube.com/watch?v=sTyDHTUCw48)