



Kids Itching to Get Back to School this Autumn

Lice may not be a condition that is currently on people's minds as we associate lice with school time. But it's not all about school and it's not just head lice (although, looking at the graph for head lice treatment sales in 2019, school obviously plays a huge part in head lice infestations). Threadworm on the other hand doesn't have such obvious spikes at different times of the year and is quite prevalent during summertime as children get out to play in the sun (and dirt!).



Written by JeanAnne Mulligan MPSI,
Mulligans Pharmacy

LICE

Introduction

Lice are parasitic insects that feed on human blood. They almost evolved to live off us in secret except for one fatal flaw – the itch. The saliva of lice contains an anticoagulant. The lice inject this saliva into the skin as they feed to prevent blood from clotting. Many form an allergic reaction to this saliva. With some being more allergic than others – hence the variety of the itch between individuals. Some have no itch, some have mild itch and some have severe itch. Additionally, the itch may take time from initial infestation to develop as lice mature, lay eggs and grow in number; and as the allergic reaction builds. This can be in the region of days to weeks.

There are a few different types of lice: head lice; body lice; and pubic lice – named for the areas where they like to feed and, hence, live.

DIAGNOSIS

Symptoms

Head lice symptoms are pretty widely known at this stage: itching and/or tickling sensation of the

scalp and immediate surrounding areas. Some may also present with raised, red bumps in these areas. Infection of the skin is not a symptom of head lice as they do not carry or cause disease themselves. Rather, the damage to the skin caused by scratching can provide micro-organisms with an opportunity to invade (known as secondary infection). Common sites to find head lice are at the nape of the neck and above the ears.

Body lice may not be as commonly seen due to the fact that the vulnerable groups prone to the condition are less likely to present for medical advice [e.g. those who are homeless, those living in crowded, unhygienic accommodation (e.g. refugees)]. These groups have reduced or no access to clean clothes and sanitation.

Symptoms of body lice include red, raised bumps and intense itching with the possible addition of areas of blood and crusting at bite mark sites. Again, not everyone experiences the itch. As body lice actually live in clothing (and bedding) and only migrate to the skin to feed, symptoms may

be more obvious where clothing seams tend to sit – groin, waist, armpits, shoulders, neckline – as this is where the lice prefer to lay their eggs. In prolonged infestations, skin may darken and thicken in areas where lice are feeding more – such as the midsection of the body. Unlike head lice and pubic lice, body lice are known to carry and transmit diseases such as typhus, relapsing fever or trench fever. Secondary infection is also a possibility if the skin is broken through scratching.

Pubic lice (aka 'crabs' due to their crab-like anatomy) can cause intense itching around the genital area but, despite their name, can actually spread to other areas of the body with coarse hair – e.g. legs, chest, armpits. They can even spread to the eyelashes and eyebrows (more common in children) where they can cause conjunctivitis-type symptoms. Not everyone will have the same level of itching so some other symptoms may include bluish spots in the area where lice have been feeding as well as brown particulates in underwear (lice faeces). Pubic lice cannot carry or cause disease but secondary infection can occur if skin is scratched raw.

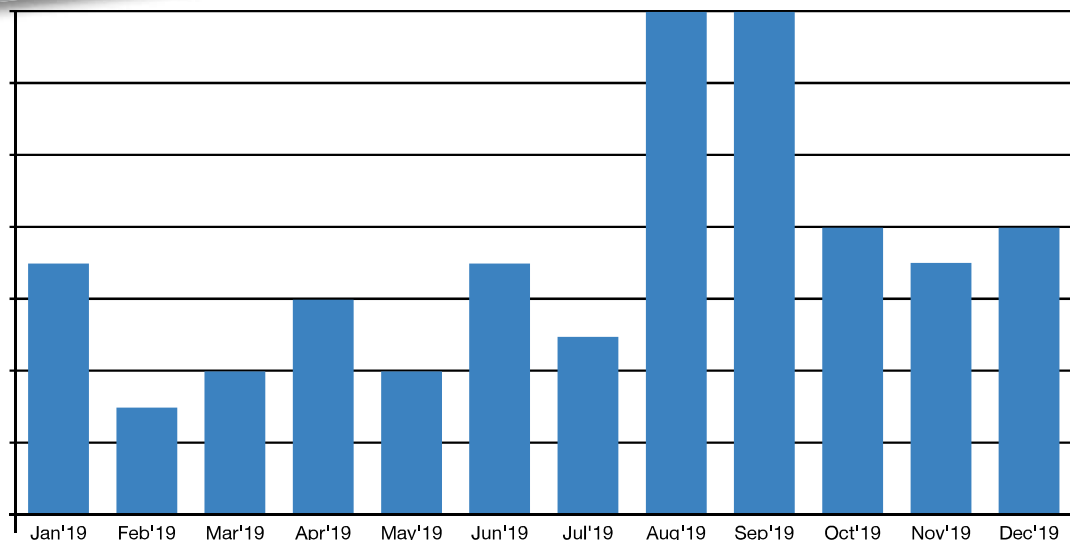
Differential diagnosis

Lice infestations can share similar symptoms with other skin conditions, so it's always important to consider 'what else could this be?'

- Scabies causes an all-over body itch but can be identified by the burrow tracks the mites create (which are often found between the fingers and toes). Scabies mites are not visible to the human eye whereas body lice are roughly the size of a sesame seed.
- Seborrheic dermatitis can affect any hair-bearing area. If both scalp and other hair-bearing areas are affected, this may be a possible diagnosis as no lice can affect coarse hair on the body and hair on the head (a combination of head lice and body lice could be considered but other factors should be taken into consideration (e.g. likelihood of body lice etc.)).
- Dandruff flakes seen on the scalp can be mistaken for head lice nits (empty lice eggs). Dandruff is found on the scalp itself whereas nits are actually attached to hair shafts. Dandruff can be dislodged easily but nits need to be physically removed with a tweezers/fingers/nit comb as they are strongly attached to the hair shaft.
- Conjunctivitis-type symptoms may present in those with pubic lice that have spread to the eyelashes/eyebrows (most likely from scratching the infested area and then touching the eye area). Careful questioning on any other symptoms and close inspection of the eye(s) can aid a correct diagnosis.
- Bed bugs do not live on humans but in soft furnishings – such as in hidden spots of mattresses. They feed at night and may not cause a reaction for days after their feeds and so the host may not even realise the cause of their symptoms. They leave their host after their feeds and so are not found on the body. Bed bugs are much larger than lice



Headlice Treatment Sales 2019



(measuring roughly the size of an apple seed) and often leave bite marks in trail formation.

Transmission

Lice are wingless insects and so cannot fly, jump nor hop between hosts. They're usually picked up from close contact with an infested person but can be transmitted on objects (e.g. hair brushes) and soft materials/furnishings (e.g. bedding, clothing, towels, etc.). Lice can live for 1-2 days off their host but eggs that have been laid on the host and then removed/fall off can emerge alive after incubation. This is unlikely to be a problem as most will not hatch as body heat from their host is needed for successful incubation and the louse will need food within 24 hours once hatched. This makes it unlikely to catch lice from non-human surfaces 1-2 days after they have had no contact with their host but it is still recommended that if the washing guidelines are not followed, to quarantine objects/materials for 2 weeks to ensure no live lice remain.

More specifically, head lice are transmitted with close head contact which is most common in primary school children. Patients and parents can be reassured that infestation is not a sign of poor hygiene. Body lice are spread through direct physical contact with an infested individual and through items such as clothing and bedding that is not washed/changed regularly. Pubic lice are commonly spread during sexual activity so a sexual history may help during diagnosis. Note that if pubic lice are found on children, sexual assault should be considered a concern. Pubic lice can also spread through the

shared use of infested clothes and bedding. Again, patients should be reminded that pubic lice is not a sign of poor personal hygiene.

Treatment

It is only recommended to treat lice if live lice are found. Finding nits (empty eggs) does not warrant treatment. Searching for head lice should be done using a fine-toothed comb. It is not unheard of for schools to send out a notice to parents to treat all children for lice but these administrations should be contacted to retract their statement and provide appropriate advice.

Body lice do not usually require treatment other than washing and regular changing of clothes and bedding as well as avoidance of contact and sharing of clothes and bedding with suspected infested individuals.

There are several treatment options for head lice and pubic lice: wet combing, OTC remedies, home remedies. Wet combing: 1. Wash the hair, add conditioner and brush through; 2. Split the hair into square sections no wider than the comb itself; 3. Drape a white towel over the shoulders to spot any lice/nits that fall; 4. Scrape the comb along the scalp of the hair section at a downward angle and drag down the length of the hair; 5. Wipe the comb on a tissue and check for lice/nits; 6. Repeat this process at upward and side angles on the same hair section; 7. Repeat steps 4, 5 and 6 for all hair sections then wash out the conditioner. If used as the sole treatment, wet combing should be repeated every 4 days for about 2 weeks and continued until no live lice are found for 3 consecutive sessions.

OTC head lice treatments are probably the most common treatment as they are perceived to be quick and easy. However, to really clear the head, wet combing should be carried out during and after a treatment. In light of rising resistance against pesticides, head lice treatments with a physical action rather than pesticide action are preferred – especially in cases of treatment failure.

Physical treatments include Osmolone (e.g. Lyclear® Treatment Shampoo), Natrum muriaticum (e.g. Vamousse®), Oxyphthirine (e.g. Lyclear® Sensitive Treatment/Lyclear® Treatment Lotion), Dimethicone (e.g. Lyclear Treatment® Spray/Hedrin® Once), Activdiol (Hedrin® Treat & Go) and Cyclomethicone & isopropyl myristate (Full Marks®). Pesticide treatments include permethrin (e.g. Lyclear® Crème Rinse) and Malathion (e.g. Derbac-M®). Note that preparations containing alcohol can cause wheezing in asthmatics and skin irritation in those with sensitive skin or scalp conditions.

Lyclear® Dermal Cream (permethrin – a pesticide) is not licensed to treat head lice but is licensed to treat pubic lice (and scabies).

Some may wish to treat head lice or pubic lice with home remedies – such as essential oils. Make your patients aware that, while it is safe to treat in such a way, there is little evidence for efficacy.

THREADWORMS

Introduction

Threadworms (aka pinworms) are the most common intestinal worm seen in Ireland. Other worms are usually contracted during foreign travel to high-risk

areas. Threadworms are tiny parasitic worms that infect the large intestine. These helminths have a lifespan of roughly 6 weeks. Unhatched eggs can live for 2-3 weeks outside the body and will survive after falling off their host.

Diagnosis

Symptoms

The typical symptom of threadworm is an intense perianal itch that usually gets worse at night as the female worms exit the large intestine to lay eggs around the anus. The mucus around these eggs is the cause of the itch. Threadworms can be seen in faeces and around the anus itself. They range in size from 2mm to 12mm in length and resemble a piece of white thread. More severe infestations can cause stomach upset, leading to appetite loss. The situation itself can cause irritability in the infected individual, not only as a result of the symptoms but also from the interrupted sleep caused by the intense itching. In girls, threadworms may travel towards the vagina and urethra and cause associated symptoms here. Secondary infection is possible if nails are not kept short and skin breaks as a result of scratching.

Differential diagnosis

Questioning for additional symptoms can be useful in determining the type of worm present – other worms don't tend to present with anal itch and regular visible worms but more often present with gastrointestinal discomfort and associated symptoms. Additionally, as most other worms are usually found in hot, humid climates and in areas of poor hygiene, this can also be helpful in your diagnosis.

Transmission

Threadworms are mostly seen in young children and this is due to the fact that they play outdoors without much concern for washing their hands before putting them near their mouths. Additionally, the close contact children have with each other makes it easy for infections to pass between them. Threadworms are very contagious between individuals with close contact (e.g. living in the same household) as the eggs that fall off the host can survive for 2-3 weeks until a new host comes along and somehow manages to transfer them to their mouth.

Treatment

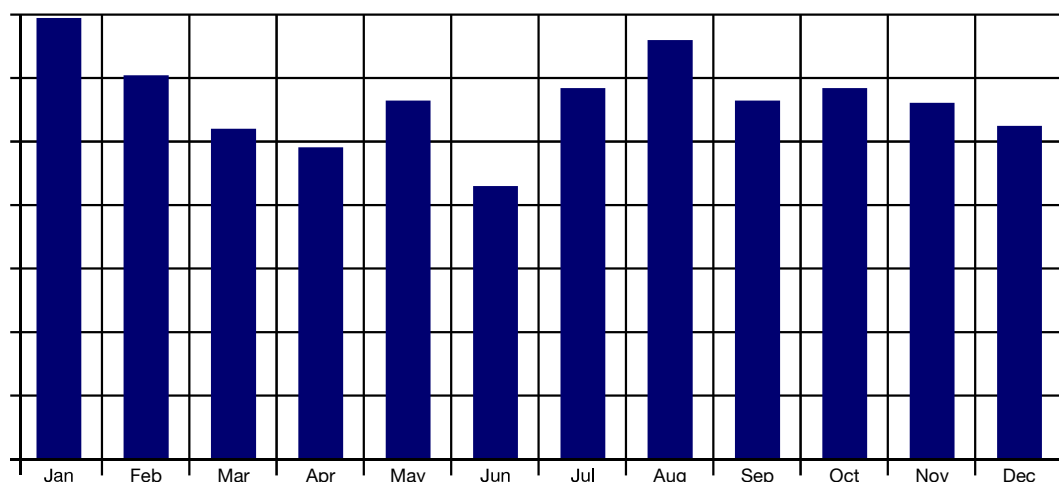
Vermox® (mebendazole) is the OTC treatment suitable for everyone (excluding those under 2 years and pregnant women). It kills the worms by stopping their ability to absorb glucose but has no



Vermox Sales 2019

effect on eggs and so patients need to be counselled on being hyper-aware of the necessary hygiene measures when dealing with threadworms to avoid ingesting the eggs again (i.e. strict hand-washing, regular cleaning of frequently-touched surfaces, thorough and repeated vacuuming, damp dusting, keeping nails short, no sharing of towels, bedding or clothing).

Dosing depends on the worm present. But as most infections in Ireland are likely to be threadworm, the single dose is going to be the most commonly recommended. And because mebendazole does not kill eggs, it's recommended to take a second dose after 2 weeks when the eggs will have hatched. Although medicated treatment is preferred, threadworms can be eradicated from a home with six weeks of strict hygiene measures.



Time for Diabetes Onset in Children

A delay in the diagnosis of Type 1 diabetes can quickly lead to a life-threatening complication called Diabetic Ketoacidosis or in short DKA. Early recognition of the symptoms and early treatment can prevent the development of DKA.

Four in every 10 Irish children with new onset Type 1 diabetes have DKA at the time of their diagnosis. This number has been increasing since 2016. Up to 2015 about 3 in 10 of our children had DKA at diagnosis.

Delays in diagnosis can happen because the symptoms of Type 1 diabetes are subtle.

Community pharmacists and their

teams need to know the symptoms of Type 1 diabetes so you can recognise them early and take action. The symptoms are the key indicators that a child might have Type 1 diabetes.

TEST which is easy to remember as an acronym represents the symptoms of Type 1 diabetes.

Acting fast has great benefits – it will enable earlier diagnosis and

treatment and can avoid the development of DKA. Avoiding DKA can make the initial treatment much easier for children and their families and has short and long term benefits.

While a diagnosis of Type 1 diabetes is a life-long condition, there are thousands of Irish people and indeed worldwide with Type 1 diabetes living their lives to the full each day.

The symptoms of Type 1 diabetes in children can be easily remembered by thinking of the word TEST:

- Thirst Increased
- Energy Reduced
- Sudden reduction in Weight
- Toilets Trips Increased

Lost Generation to Obesity

Three out of every four people in Ireland want celebrities banned from endorsing unhealthy food and drinks, new data shows.

And even more favour a crackdown on fast food ads in kids' online games and apps as experts warn we face "losing a generation of children" to obesity-related disease.

The Irish Heart Foundation says research by Ipsos MRBI proves the public is now overwhelmingly demanding the Government keeps a promise to introduce new laws protecting youngsters from junk food marketing.

The charity says children as young as eight are presenting with high blood pressure and young people are showing early signs of heart disease usually seen in middle-aged men.

It warns that unless "drastic action" is taken, 85,000 of this generation of children will die prematurely due to overweight and obesity – almost the entire population of Co Laois.

"More children will go on to suffer heart disease and stroke in the future," said Helena O'Donnell, Childhood Obesity Campaign Manager with the Irish Heart Foundation.

"Twenty per cent of children live with overweight or obesity and what we have noticed is that inequality remains quite strong, with rates in disadvantaged areas reaching one in four (25%)."

In 1975, childhood obesity affected just 1% of children in Ireland, but by 2016, 30% of girls and 31% of boys were overweight, with 9% of girls and 10% of boys living with obesity.

Rolling lockdowns during the pandemic are also fuelling the crisis: separate ESRI research last month showed children, especially girls, are eating more junk food during restrictions.

The Irish Heart Foundation says the Government now needs to wage war on unhealthy food marketing. A partial ban on broadcast advertising to children was introduced in 2013 – but the move sparked an upsurge in unregulated digital marketing.



Helena O'Donnell, Childhood Obesity Campaign Manager with the Irish Heart Foundation

The Ipsos MRBI research reveals that 85% of us support a ban on unhealthy food and drink brands' ads within games and apps played by children under 16, with 14% not in favour.