Scabies: Back to Basics Presentation – 23 October 2024 Transcription

Hello and welcome to this ‘Back to Basics seminar’ presentation brought to you by ARHAI Scotland.

This is the first in a series looking at key issues that have been highlighted to us by our stakeholders. In this presentation we will be looking at the Scabies mite, infestation and its management.

Learning outcomes

We hope by the end of this session you will have an understanding of:

- what a scabies mite is
- how they are spread
- where you can find guidance and
- how to start managing an outbreak

The mighty mite

Scabies mites are properly called Sarcoptes scabiei.

The typical clinical presentation of an infestation of scabies is intense itching associated with burrows, nodules and redness. However, asymptomatic infestations have been demonstrated in the elderly.

Symptoms may last for weeks or months, can be hard to recognise and are often mistaken for other skin conditions, leading to avoidable transmission.

Scabies is most often transmitted by prolonged or frequent skin-to-skin contact. Itching may be severe, particularly at night and scratching may lead to secondary bacterial infection and its complications.

There is considerable stigma associated with scabies, which can contribute to under-reporting both in the community and among staff and residents in care facilities. We hope that by getting an understanding of the mite, it will become a bit more normalised and reduce this stigma.

Scabies transmission

The scabies mite is a burrowing mite. They feed using their mouths and front legs to burrow into the outer layer of skin (epidermis), where they lay eggs.

After three to four days, the baby mites (larvae) hatch and move to the surface of the skin as they mature into adults. When they migrate to the skin surface, this allows transmission. Scabies is contagious from the point of infestation, that is, whenever mites are present on the skin.

Scabies like warm places, such as skin folds, between the fingers, under fingernails, or around the buttock or breast creases.

They can also hide under watch straps, bracelets or rings.

Scabies mites can’t fly or jump, which means they can only move from one human body to another if two people have direct skin-to-skin and prolonged physical contact.

It’s unlikely that scabies will be transmitted through brief physical contact, such as shaking hands or hugging.

Scabies mites can survive outside the human body for 24 to 36 hours, making transmission by coming into contact with contaminated clothes, towels or bed linen a possibility. However, it’s rare for someone to catch them in this way. Mites and larvae quickly desiccate and die outside their burrows.

There’s an increased risk of catching scabies in confined environments, such as care homes, where people are in close proximity to one another or where personal care is given.

Scabies infestations can spread quickly because people are usually unaware they have the condition until two to three weeks after the contact.

Identification

The first noticeable symptoms of scabies may be itching.

The itching is due to an allergic reaction to the mite's droppings. It may take four to six weeks before the itching starts because this is how long it takes for the body to react to the droppings. This is known as the incubation period.

However, symptoms will start within one to two days if you've had scabies in the past. This is because your immune system will have learned to respond to the scabies mite's droppings.

The itching is often worse at night, when your skin is warmer.

"Classical" Scabies make burrow marks on the skin of short, wavy and silver-coloured lines.

In adults, burrow marks often appear in the following areas:

- the folds of skin between fingers and toes
- the palms of the hands
- the soles and sides of the feet
- the wrists
- the elbows
- around the genital area
- the underarm area
- around the waist

Burrows and rashes may affect parts of the body typically covered by clothing, for example, the torso or legs, therefore careful and thorough examination including the removal of clothing is recommended.

Among elderly residents in long-term care settings, the clinical presentation may be very different. Those with underlying cognitive impairment may display no symptoms

or may not be able to communicate that they are itching and might not scratch. This makes diagnosis very challenging

A bacterial skin infection may mask an underlying scabies infestation.

Atypical presentations may occur in immunosuppressed patients.

Crusted scabies

“Crusted” scabies is a rare but more severe form of scabies, where a large number of mites are in the skin. This form of scabies can be more transmissible due to the increased numbers of mites.

Crusted scabies most commonly occurs in the elderly, immunocompromised or malnourished people. This form of scabies is characterised by a scaly rash and thickened crusts of skin containing many mites, alongside heavy skin shedding.

Itching may be absent.

Treatment can be more challenging.

Scabies within care homes

Let’s recap what we have covered so far.

Within a care home setting

- An infestation can cause real distress in this very vulnerable population.
- Scabies can look different in the elderly, for example some don’t itch or communicate that they are itchy, so it can often get missed.
- It can be very stigmatising for both residents and staff. This is likely due to historical associations with poor hygiene or poverty. An infestation was often associated with marginalised populations or overcrowded living conditions. This long-standing connection serves to amplify the stigma. This misunderstanding can make people fear social rejection.

We need to support a compassionate and informed response to those affected.

Management of scabies

Next, we will look at:

- what guidance is available
- how we can identify a case of scabies
- what treatment of a case involves
- what infection prevention and control measures are advised

Guidance

Public Health Scotland is currently working on scabies public health guidance for Scotland, with the aim to publish next year, 2025.

As we manage scabies using standard infection control precautions, using the CH IPCM is appropriate.

There is some really useful guidance available from the UK Health Security Agency, more commonly known as UK H S A or UKHSA. You will be able to find this online by typing UKHSA and Scabies into your preferred search engine.

Identification:

Currently available tests are rarely helpful in scabies diagnosis and management. The examination of skin scrapings with a light microscope to identify mites, mite eggs, or faeces is often considered to be the ‘gold standard’ but this method has poor sensitivity and is rarely performed and is rarely available in the community. In an elderly population, taking the scrapings from fragile or friable skin can be uncomfortable and distressing. You should contact the GP in the first instance to provide a diagnosis.

Dermatology services may be able to support in making a diagnosis but you should not delay commencing treatment or implementing outbreak control measures, due to the distressing nature of symptoms and the possibility of onward transmission in care home settings.

If a case is identified, there should be a check of all residents and staff for signs or symptoms to ensure this is a true single case and not an unidentified outbreak. We will cover what to do in an outbreak situation later in this presentation.

Treatment

As said in the previous slide, if there is a suspicion of a case of scabies within the care home call the GP for the resident or home.

If they confirm a Scabies infestation, the GP will prescribe treatment. There are different types of treatment, with the most commonly prescribed being a lotion. There is an oral treatment available which may be considered as an option if, for example, topical treatments have been used correctly and not resolved symptoms or in circumstances covered later.

The cream or lotion should be applied to the skin of all the body. Before it is applied, make sure the skin is cool and dry. If you apply it when your body is hot, it will quickly be absorbed into your skin and won't remain on the area where the scabies burrows are.

When using a cream or lotion to treat scabies, you should:

- read the treatment leaflet that comes with the cream or lotion for details of where and how to apply it. Some products need to be applied to the whole body, including the scalp and face, whereas others must only be applied from the neck down
- pay particular attention to difficult-to-reach areas, like in between fingers and toes, under fingernails, genitals and other skin folds
- leave the treatment on the skin for the recommended time before washing it off thoroughly, following the treatment leaflet
- repeat the treatment process seven days after the first application to ensure it's successful. The second application will ensure any mites hatched from existing eggs are killed

It can take a month after treatment for the general itching to subside completely.

Children and adults can return to school or work after the first treatment has been completed.

Infection Prevention and Control or Infestation Prevention and Control

Infection Prevention and Control measures or, perhaps in this case, infestation prevention and control!

PPE

Standard infection control precautions should be sufficient to prevent transmission. In line with the CH IPCM, wearing gloves and plastic aprons for tasks is appropriate. However, for activities such as close personal care and handling where skin-to-skin contact with the resident, infested linen or clothing could occur, single patient use long sleeve gowns or sleeve protectors may be beneficial to reduce the risk of transmission.

Environmental management

Cleaning

The aim of cleaning in the event of a case or outbreak of scabies is to remove skin scales and dust in the environment.

The role of fomites, or surfaces, in transmission of scabies is unclear; however, mites are very unlikely to survive without a host for very long.

Regular vacuuming and a thorough clean after treatment cycles (for example, damp dusting soft furnishings, cleaning touch points, vacuuming mattresses and so on) should be considered as part of breaking the chain of transmission.

Laundry

Settings should already be compliant with guidelines around decontamination of laundry.

Staff should make sure that a laundry trolley or container and alginate bags are available as close as possible to the point of use for immediate linen deposit

Residents' clothing

Items should be placed in dissolvable alginate bags (where available and if compatible with available washing machines) and either processed in a commercial or the on-site

laundry as infectious linen, as outlined in the Care Home Infection Prevention and Control Manual.

Any heat-labile clothing (for example clothing that may be damaged or shrink during thermal disinfection) may be placed in a sealed plastic bag for at least 4 days prior to laundering: this should be sufficient to kill any mites present (UKHSA guidance). This method does not apply to other infections.

Clothing which has been worn by affected individuals in the period prior to completion of the first 24-hour treatment dose should be handled using appropriate PPE.

The contaminated items should not be mixed with those belonging to unaffected residents.

It should not be necessary to launder any items that have not been touched by the resident in the past week.

Linen and towels

Bed linen and towels of cases should be processed as infected linen.

Staff should not:

- rinse, shake or sort linen on removal from beds or trolleys
- place used linen on the floor or any other surfaces for example on a locker or tabletop

After laundering items should be dried immediately in a tumble drier.

As we manage scabies with standard infection control precautions, waste management would be as normal and that's the same for cleaning products, it's more about the reduction in skin flakes within the environment rather than using a chlorine-based product.

Outbreak management

What is the definition of an outbreak?

Two or more linked cases with the same infectious agent associated with the same setting over a specified time. In this case it would be two or more cases within an eight-week period, for example.

Support for management of the any outbreak can be sought from your Health Protection Team. They may decide to hold a meeting to support you in the effective management of the outbreak.

Identification

Once a single case has been identified, all residents and staff should be checked for signs or symptoms of a Scabies infestation to see if there is an undetected outbreak going on. This should be done before treatment of the single case is undertaken. Secondary case identification and breaking the cycle of transmission can be more challenging in a care home setting but it is the key step to prevent the outbreak spreading and ensure effective management and treatment is undertaken.

Contact tracing

Contact tracing should identify contacts within the eight weeks before the case's diagnosis.

These may include:

- all residents of the setting unless there is a clear rationale for more limited tracing for example:
    - residents on a single affected floor or wing if there is no mixing or movement of staff or residents and between floors or wings
- all members of staff (including agency staff) exposed to the index case without wearing appropriate PPE
- visitors to the setting who have had prolonged or frequent skin-to-skin contact with a case
- ancillary staff, for example, hairdressers, podiatrists, community health professionals and agency staff

Effective treatment relies on co-ordination: all contacts should receive treatment at the same time as the confirmed cases.

Individual case management should happen simultaneously for all cases and contacts in the outbreak.

The oral treatment option for scabies within care home settings might be considered by the treating physician, particularly when there are logistical considerations around the successful co-ordination of topical therapy, or in the context of immunosuppression or crusted scabies. This should be explored as part of the management of the outbreak in conjunction with the HPT.

If staff are off duty at the time of treatment, they should complete the first 24-hour treatment dose before returning to work.

Isolation

For classical Scabies: Isolation of residents is not usually required as they will all be undergoing treatment at the same time and staff will be wearing appropriate PPE. If uncertain that a treatment has been completed successfully (for example, rubbing off of cream prematurely, or inability to provide full cream coverage), consult with your support team (HPT or GP, for example) to consider alternative treatments such as oral.

For crusted Scabies: Standard infection control precautions for crusted scabies and a co-ordinated approach to treatment means isolation of people with crusted scabies may not be recommended. However, close contact with persons not undergoing concurrent treatment or unable to wear appropriate PPE should be avoided.

Affected individuals may require several applications of treatment or oral treatment, in order to fully treat the person. Due to the complexities of treating crusted scabies, the decision as to whether the patient is no longer infectious should be guided by the specialist clinician involved in care. Limiting skin-to-skin contact where possible is advisable until non-infectious.

Exclusion:

Staff

Members of staff who are diagnosed as having scabies, or identified as contacts of a case, should not return to work (in the affected setting or others they may work in) until after their first 24-hour treatment dose is completed.

They should co-ordinate their treatment doses to coincide with the care home’s treatment dates.

Staff members identified as cases who have household or other contacts identified in the community should advise their contacts to also co-ordinate their treatment doses as much as possible, to avoid further transmission back to that staff member.

It is the responsibility of the setting management team to determine the most appropriate route for staff to access treatment, for example, the setting healthcare teams or GPs, or their own personal GPs. Your HPT will be able to support your care home management team, outbreak co-ordinator or other lead in identifying this.

Any agency staff diagnosed with scabies should inform their other places of work including home (domiciliary) care recipients so that these settings can also be risk assessed and clients identified.

IPC

IPC measures should be as we have discussed earlier but across the whole setting. This may be more resource-intensive and this should be taken into account as part of the overall outbreak management strategy.

Communication

This is where the stigma associated with scabies can have a real impact on the management and ending of an outbreak. Communication, clear and effective communication, is key.

Family members and other regular visitors (for example, healthcare staff, hairdressers and podiatrists) to the setting who may or may not have close physical contact with cases should be advised about the scabies outbreak, be given advice on the symptoms of scabies and advised where appropriate to seek treatment from their GP if they meet the definition of a case or contact. An example leaflet is available in the UKHSA guidance.

Putting up a poster or notice in a public area would be a recommended measure, to inform visitors that an outbreak is currently being experienced and advise on wearing of appropriate PPE for any close contact.

Visiting healthcare workers (for example, district nurses or physiotherapists) who have close or prolonged physical contact with residents should be informed of the outbreak

prior to their visit and reminded of the importance of wearing appropriate PPE for any skin contact with affected residents and given access to PPE for their visit.

Visiting

This is always an area that causes a lot of worry. The benefits of visits to residents are likely to greatly outweigh the risks to visitors, which can be managed by recommending avoiding skin-to-skin contact and wearing of appropriate PPE. All visits to the setting and individuals should be risk assessed appropriately.

Transfers out of the setting experiencing an outbreak

If a case or contact requires transfer to a new closed setting (for example, hospital or care home), the admitting setting should be informed of the outbreak prior to the admission and a risk assessment undertaken. Transfers of cases and contacts should ideally occur after the first 24-hour treatment dose, at which point the risk of onward transmission is minimal. Transfers can take place sooner than this if appropriate mitigations are agreed.

The risk assessment should consider at least:

- whether the person requiring transfer has completed the initial 24-hour treatment dose and whether transfer can be delayed until this has taken place
- whether close, prolonged skin-to-skin contact with others can be avoided during the treatment period, for example, whether the person is prone to walking with purpose or hand holding
- whether staff caring for the patient are able to maintain use of appropriate PPE during close contact until the treatment period has ended

People who do not meet the definition of case or contact can be transferred as usual.

Ongoing monitoring

An outbreak can be considered as under control when all cases and contacts have received the full recommended treatment regimen (for example, two doses of topical cream application).

However, ongoing monitoring and a period of heightened surveillance after all cases and contacts have completed treatment is advised to reduce the risk of outbreaks continuing unchecked.

This period of heightened surveillance should include regular re-assessment of staff and residents for any new symptoms, and to ensure symptoms are resolving as expected following treatment, and should last for 12 weeks (that is, two mite incubation cycles) after the onset date of symptoms in the last known case.

A scabies outbreak can be declared over if no new cases are identified within 12 weeks of symptom onset date of the last known case. Nodules can take several months to resolve after successful treatment.

It is important to note that symptoms (that is, itch or rash) may continue for up to six weeks after treatment completion, and does not necessarily imply a failure of treatment or re-infestation.

If residents or staff members remain symptomatic after treatment, they may need to be reviewed by their GP to rule out other possible causes of their symptoms and provide symptomatic relief for itching.

If further scabies outbreaks occur within 12 weeks of the original outbreak this should be flagged to the HPT to review whether this is a new outbreak or a continuation of the original outbreak.

In both scenarios, infection control procedures and treatment regimens should be reviewed carefully to identify possible failures in breaking the transmission chain or de-infestation.

Learning outcomes

Let’s review the learning outcomes we set at the beginning of this presentation. There has been a lot of information here and we hope you now understand

- What a scabies mite is
- How they are spread
- Where you can find guidance and support
- How to start managing an outbreak

And we will shortly hear from my colleague Ross Darley about a real-life experience, although within a hospital setting rather than a care home. This will hopefully let you see that it can happen in all areas where care activities are undertaken.

Thank you for listening to this Back to Basics presentation. If you have any queries, please don't hesitate to contact us at this email address: nss.ARHAIinfectioncontrol@nhs.scot