



Medicines Optimisation

Best Practice Guidance for Care Homes – *Bulletin 7*

Bisphosphonates

Bisphosphonates

Bisphosphonates are medicines which work on the cells which make bones. They slow the breakdown of bone and help to restore some of the lost bone. Bisphosphonates can be prescribed for many reasons including:

- People who may be at risk of falls due to medication.
- People with a diagnosis of osteoporosis.
- People who take long-term steroids or repeated short courses of high dose steroids as these can weaken the bones.
- People who may have a low bone-density due to age, weight, diet, or family history.

The most common bisphosphonates that you will see are alendronic acid 70mg tablets or risedronate 35mg tablets. These are usually prescribed as a **ONCE WEEKLY** dose. You may have a resident who takes ibandronic acid 150mg, this is usually a **ONCE MONTHLY** dose.

Bisphosphonates can be effective in preventing fractures in vulnerable patients, but it is very important that they are taken correctly otherwise they may not work.

Bisphosphonates are usually taken long-term as it can take several months for them to start working. They should be reviewed by a doctor after three to five years. Some studies show that bisphosphonates keep working on the bone for a few years after the medicine has been stopped. It may also be that taking them for longer than five years does more harm than good. Therefore, some patients will need to continue, some can stop, and some may be able to take a break from taking it¹

Consider requesting a GP review for residents who have a bisphosphonate prescribed and are bedbound or hoisted for all transfers, it may be possible for the bisphosphonate and calcium to be stopped.

Bisphosphonates can cause side effects (see the relevant patient information leaflet) such as nausea, indigestion, diarrhoea, or constipation, most common in the first month. Side effects which need reporting to the GP include: new joint/muscle pain, worsening heart burn/ swallowing difficulties (if resident develops any new or worsening swallowing difficulties the medication should be withheld and GP contacted)/chest pain, jaw pain/ swelling, ear pain/discharge, new hip/groin or thigh pain² There are several other side effects residents and carers should be aware to look out for when taking bisphosphonates. Please read the leaflet in the medication box.'

How to take bisphosphonates

It is very important to administer bisphosphonates correctly:

- Make sure that the tablet is being administered on the correct day.
- They should be taken first thing in the morning on an empty stomach (**at least half an hour before the first food or drink of the day**).
- The tablet should be swallowed whole with a glass of water and the resident must sit upright or stand for 30 minutes (60 minutes if taking ibandronic acid).
- The resident should wait at least 30 minutes before taking medication, eating, or drinking anything other than water.
- If a resident is struggling with their bisphosphonate or develops a swallowing problem, inform the GP straight away as it may not be appropriate for the resident to continue with it.

How to record on a MAR chart

- MAR charts need to be clearly marked to highlight which day the next dose of bisphosphonate is due.
- For alendronic acid and risedronate, make sure the dose is given on the same day each week and highlight this on the MAR sheet.
- For ibandronic acid, make sure that the date is marked clearly on the MAR. This should be the same date each month. At the end of the month the information must be transferred correctly onto the new MAR.
- It is very important that the bisphosphonate is given on the correct day. If it is administered on the wrong day this should be recorded in the care plan, on the MAR chart and the GP should be informed.
- It is important that the MAR chart is amended for future doses as there needs to be a full week or month between doses, depending on bisphosphonate.

Calcium Supplements

Calcium and Vitamin D supplements are usually prescribed in addition to bisphosphonates as they also help reduce the rate of bone loss.

- The directions from the GP should state clearly when they should be taken.
- They can affect the absorption of the bisphosphonates so should not be given at the same time of day – the calcium preparation should be given at least **four hours later**.
- Sometimes the instructions may state that they should be omitted completely on the day the bisphosphonate is taken.
- Seek advice from a pharmacist and update the MAR chart accordingly, if required.

Adapted with kind permission from Northern, Eastern and Western Devon CCG and South Devon and Torbay CCG

References

- 1 <https://patient.info/bones-joints-muscles/osteoporosis-leaflet/bisphosphonates> updated October 2023
- 2 NICE Clinical Knowledge Summaries(CKS) – Bisphosphonates <ps://cks.nihttce.org.uk/topics/osteoporosis-prevention-of-fragility-fractures/prescribing-information/bisphosphonates/> accessed April 2023

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| 2.0 | Jan 2016 | Prescribing & Medicines Management Team <i>JC/ SW</i> | | Reviewed & references/ links checked |
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