

## KeyPoints

### Advantages and disadvantages of suppositories as dosage forms

#### Advantages

- Can exert local effect on rectal mucosa.
- Used to promote evacuation of bowel.
- Avoid any gastrointestinal irritation.
- Can be used in unconscious patients (e.g. during fitting).
- Can be used for systemic absorption of drugs and avoid first-pass metabolism.

#### Disadvantages

- May be unacceptable to certain patients.
- May be difficult to self-administer by arthritic or physically compromised patients.
- Unpredictable and variable absorption *in vivo*.

### British Pharmacopoeia (BP) definition (pessaries)

Pessaries are solid, single-dose preparations. They have various shapes, usually ovoid, with a volume and consistency suitable for insertion into the vagina. They contain one or more active substances dispersed or dissolved in a suitable basis that may be soluble or dispersible in water or may melt at body temperature. Excipients such as diluents, adsorbents, surface-active agents, lubricants, antimicrobial preservatives and colouring matter, authorised by the competent authority, may be added, if necessary.

### General method

The methods used in the preparation of pessaries are the same as those for suppositories. Within this chapter, points relating to suppositories can also apply to pessaries.

The preparation of suppositories invariably involves some wastage and therefore it is recommended that calculations are made for excess. For example, if you are

required to dispense six suppositories, to include a suitable excess, calculate for 10.

### Suppository mould calibration

Suppository moulds (Figure 7.1) are calibrated in terms of the weight of Theobroma Oil BP each will contain. Typical sizes are 1 g, 2 g or 4 g. Since the moulds are filled volumetrically, use of a base other than Theobroma Oil BP will require recalibration of the moulds. Many synthetic fats have been formulated to match the specific gravity of Theobroma Oil BP and therefore the mould sizing will be the same and not require recalibration. However, this is not the case for all synthetic bases.

To recalibrate a suppository mould, the compounder needs to prepare a number (e.g. five) of (perfectly formed) suppositories containing only the base. These can then be weighed and the total weight divided by the number of suppositories present to find the mould calibration value.