

Position Statement
PRESCRIBING for CLINICAL NEED
Analgesics: Soluble* Tablets to Plain Tablets (or liquid) in Adults†

Summary

Blackpool CCG is focussed on the effective use of resources, including the prioritisation of prescribing, and providing interventions with the greatest proven health gain for the population, i.e. prescribing for clinical need.

While soluble and effervescent preparations of analgesics may appear convenient, it is important to be aware of their high sodium content. Eight soluble paracetamol per day exceed the maximum recommended sodium intake for an adult of 6gm salt; this equates to 2.4gm of sodium. An observational study has shown an association between sodium-containing formulations of effervescent, dispersible and soluble medicines and adverse cardiovascular events.¹

These products are considerably more expensive than standard tablets or capsules. Therefore, they should only be prescribed with caution and only if there are compelling reasons to do so, for example patients with genuine swallowing difficulties.

Background

An observational study has shown an association between sodium-containing formulations of effervescent, dispersible and soluble medicines which is potentially detrimental for patients with hypertension, heart failure, renal impairment or those on a salt restricted diet.^{1,2}

For adults the daily limit of salt (sodium chloride) is 6gm (\equiv 2.4 gm sodium), which is approximately equivalent to one heaped teaspoon.³ Soluble tablet preparations of paracetamol and co-codamol tablets contain on average 0.970gm of salt or 0.389gm of sodium per tablet.⁴

A person taking the maximum dose of eight tablets/ day would exceed their recommended daily sodium allowance without accounting for their dietary intake. In a typical Western diet, 75% of the salt eaten is already in everyday foods such as bread, breakfast cereal and ready meals.⁵

Most patients can be switched directly to a standard formulation of the same analgesic and will readily accept this change if the reason for doing so is explained to them. For patients with swallowing difficulties a suspension is a more cost effective and often more palatable option.

* Soluble may also be referred to as effervescent or dispersible tablets.

† This advice does not apply to low-dose dispersible aspirin formulations, which contain virtually no sodium.

Financial Implications

Soluble preparations are more expensive than plain tablets:

- Soluble paracetamol tablets are nearly **four** times the cost of plain tablets: paracetamol soluble tablets 500mg are £7.83 vs. £2.00 per 100 tablets, respectively.
- Soluble co-codamol 30/500 is approximately **twice** the price: £7.47 vs. £3.40 per 100 tablets, respectively.

On this basis, assuming a saving of 50% on the 2015-16 baseline spend of £195k, this could potentially offer prescribing savings of £97k.

Recommendations

- Soluble formulations of paracetamol and co-codamol should be prescribed with caution/avoided due to the high sodium content
- Soluble formulations should not be routinely prescribed as repeat medication
- Recommend self-care and purchase of the medicine over-the-counter (OTC) wherever possible, with support and advice from the community pharmacist wherever appropriate.

Medicines Optimisation, November 2017

Blackpool CCG

References

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2. Association between cardiovascular events and sodium-containing effervescent, dispersible, and soluble drugs: nested case-control study. Br Med J 2013; 347: f6954 <http://www.bmj.com/content/347/bmj.f6954>
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4. UKMi Medicines Q&As What is the sodium content of medicines? Q&A 145.6 May 2016 <https://www.sps.nhs.uk/wp-content/uploads/2014/09/NW-QA145.6-What-is-the-sodium-content-of-medicines-.pdf>
5. NHS Choices. Salt: the facts <http://www.nhs.uk/Livewell/Goodfood/Pages/salt.aspx>