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Infography

Best practice guideline for treatment of Upper Respiratory Tract Infections (URTIs) in Elite Road Cyclists

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Abstract: This best practice guideline and infographic describe the prevention and management of treatment of Upper Respiratory Tract Infections (URTIs). This best practice guide has been developed for use in elite road cycling.

Keywords: Best practice; guideline; infographic; Upper Respiratory Tract Infections; road cycling; elite sport

1. Introduction

URTIs are the commonest illness experienced by athletes and can occur up to 6 times a year in each athlete (1). Most are viral infections caused by the rhinovirus family (1).

There are times when riders are at particularly high risk of developing URTIs including during the winter/spring months (October to March), periods of weight loss, multiple travel (particularly long-haul air travel (2)), stress, altitude training (3), sleep deprivation and following particularly hard, intense training sessions or competitions (1).

Typical symptoms of an URTI include nasal discharge and congestion, sore throat, mild temperature (between 38-39°C usually) and cough, lasting around 7 days (1). Diagnosis is usually clinical.

Treatment is largely symptomatic and typical treatment options include:

a) Paracetamol 1g upto 4 times a day for temperature control and pain relief.

b) Ibuprofen 400mg upto 4 times can be added for additional temperature control as well as analgesia.

c) Vick's 1st defence can also be used if you think you are developing URTI symptoms and it appears to reduce the duration of symptoms.

d) Zinc lozenges to start within 24 hours of symptoms developing (see below section on Supplementation).

e) There are other medication options for symptomatic management but these should be discussed with your team doctor and/or checked on globaldro.com to ensure they are not prohibited to use.

f) Maintain fluid intake, with the colour of your urine being a good marker of hydration status – the lighter the colour and the need to pass urine regularly (every 1-2 hours) can be a good marker of adequate hydration.

NB - on some supplements and diets, your urine colour may be darker even if you are hydrated, especially if you supplement with beta-carotene (vitamin A).



2. References

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Prevention and Management of Upper Respiratory Tract Infections (e.g. COVID-19*) in Athletes

1. Prevention by reducing risk of cross-contamination



Avoid shaking hands
Try fist-pumps instead

Minimise contact with sick people and pets
Keep at least 2 m away

Avoid sharing drinks bottles, cups and cutlery
Wash hands before preparing and eating food



2. Prevention by maintaining good general health



Keep head and neck warm during cold-weather training

Try to get enough good quality sleep – aim for 8 hours per day
Avoid caffeine after 3pm if possible

Eat plenty of fruits and vegetables

Target adequate protein intake (2-2.5 g/kgBW/d)

Check Vitamin D status and consider supplementation (at least 800 IU daily)



3. Medical Management of URTIs



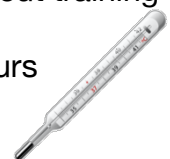
Report to a doctor as soon as symptoms develop

Modify training based on the neck rule

Symptoms neck and above only = train as normal but limit intensity

Symptoms below neck & temperature = speak to doctor about training

Normal training can resume when free from temperature for 24 hours



4. Nutritional Management of URTIs



Be Carb Conscious – taper carbohydrate to match reduction in training load
Avoid going too low to support immune function – aim for 3-5 g/kgBW/d

Pay Attention to Protein – to support weight control and immune function
Aim for 2-2.5 g/kgBM/d – spread out across the day



Consider supplementation with Vitamin C (1000 mg/d), Zinc lozenges (75 mg/d as either Zinc Acetate or Zinc Gluconate) and Omega-3 (1000 mg/d)



*note: there is evidence for these guidelines in the prevention and management of URTI symptoms, whilst it is logical that this also translates to COVID-19 as a form of URTI, there is not necessarily specific evidence for the guidelines with respect to COVID-19