August

Better Pharmacist Knowledge

Jordan Drug Information and Toxicology Centre 2022

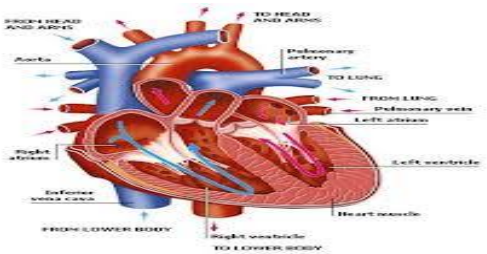
2022

Duration of therapy for uncomplicated community-acquired pneumonia in children in resource-rich settings (June 2022)

In infants and children **four months and older** with uncomplicated community-acquired pneumonia (CAP), the usual duration of antimicrobial therapy **is seven days**. In a meta-analysis of four randomized trials (>1500 participants) comparing 3 to 5 days with 7 to 10 days of outpatient antibiotic therapy for uncomplicated CAP in children in resource-rich settings, the rates of retreatment (approximately 8 percent) and hospitalization (0 percent) after one month were similar between groups, as were rates of adverse events. Study participants had a mean age of <37 months, and 80 percent of participants had respiratory viruses in the only trial that tested for them. The results are not generalizable to older children who are more likely to have bacterial pathogens or to hospitalized children. **We continue to treat uncomplicated CAP for at least five days. [1]**

Low-dose aspirin for primary cardiovascular disease prevention (June 2022)

Low-dose **aspirin** may prevent cardiovascular disease (CVD) in some patients but also **increases the risk of bleeding**. The 2022 United States Preventive Services Task Force (USPSTF) statement concluded that among people 40 to 59 years of age with a ≥10 percent risk of CVD over the next ten years, there is a small potential benefit of low-dose aspirin. **The USPSTF did not recommend starting low-dose aspirin in persons over 60 years without heart disease.** We believe the decision to prescribe aspirin for primary prevention should be made by the patient and their provider after discussing individual risks and benefits. [2]



Azithromycin instead of erythromycin for prophylaxis in preterm prelabor rupture of membranes (June 2022)

In patients with preterm prelabor rupture of membranes (PPROM), a commonly used regimen for infection prophylaxis is **ampicillin** and **erythromycin** intravenously (IV) for 48 hours, followed by **amoxicillin** and erythromycin orally for 5 days. However, a new meta-analysis of five observational studies comparing use of a single dose of IV **azithromycin** with 7 days of erythromycin as part of prophylaxis in nearly 1300 pregnancies with PPROM found that azithromycin was associated with a lower rate of clinical chorioamnionitis (14 versus 24 percent). For the macrolide part of the regimen, **our approach of giving a single dose of azithromycin** in lieu of a multiple-day course of erythromycin is supported by these findings and has the advantages of ease of administration, improved gastrointestinal tolerance, favorable cost profile, and similar or better efficacy. [3]

Anti-D immune globulin prophylaxis for pregnancy loss or termination (June 2022)

Although RhD status has historically been assessed in all pregnant individuals experiencing pregnancy loss or termination to select candidates for **anti-D immune globulin** (RhIG) prophylaxis, the risk of alloimmunization in D-negative individuals appears to be negligible before 12 weeks of gestation. In a change from prior practice, the World Health Organization **Abortion Care Guideline** now recommends **against** testing/RhIG prophylaxis of D-negative individuals before 12 weeks. By comparison, other expert guidelines (ie, Planned Parenthood Federation of American, National Abortion Federation) recommend against testing/prophylaxis before eight weeks. UpToDate contributors vary as to which of these approaches they follow, but there is consensus to offer RhIG prophylaxis to unsensitized D-negative individuals ≥12 weeks of gestation experiencing pregnancy loss or termination.[4]

References:

1. **Duration of therapy for uncomplicated community-acquired pneumonia in children in resource-rich settings (June 2022), accessed online via uptodate.**
2. **Low-dose aspirin for primary cardiovascular disease prevention (June 2022), accessed online via uptodate.**
3. **Azithromycin instead of erythromycin for prophylaxis in preterm prelabor rupture of membranes (June 2022), accessed online via uptodate.**
4. **Anti-D immune globulin prophylaxis for pregnancy loss or termination (June 2022), accessed online via uptodate.**

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Duration of antibiotics following lower extremity amputation (June 2022)

Patients undergoing lower extremity amputation may benefit from extended perioperative antibiotics. In a randomized trial comparing a 5-day with a 24-hour course of antibiotics in over 150 vascular patients without significant baseline infection undergoing lower extremity amputation, **extended treatment reduced the incidence of surgical site infection more than threefold and the incidence of impaired wound healing at the surgical site more than twofold**. The effects remained in multivariate analysis of potential confounders including age and level of amputation. While these finding support a longer course of antibiotics, we believe the level of amputation remains an important factor and have concerns about the risk of developing *Clostridioides difficile* infection**. Therefore, for clean surgical cases, we discontinue prophylactic antibiotics within 24 hours**.[1]

Oral glucocorticoids for immunoglobulin A (IgA) nephropathy (June 2022)

For patients with IgA nephropathy who are considered to be at high risk of disease progression (ie, proteinuria ≥1 g/day despite at least three months of optimized supportive care), we suggest treatment with glucocorticoids plus supportive care rather than supportive care alone **(Grade 2B).**

In patients with immunoglobulin A (IgA) nephropathy who are at high risk for progressive disease, the effect of glucocorticoids on clinical outcomes has been uncertain. In a randomized trial of over 500 patients with IgA nephropathy, proteinuria ≥1 g/day, and an estimated glomerular filtration rate of 20 to 120 mL/min per 1.73 m^2 after at least three months of supportive therapy, **the addition of oral glucocorticoids (full- or reduced-dose) to supportive therapy slowed the decline of kidney function and reduced the risk of end-stage kidney disease compared with supportive therapy alone (19 versus 27 percent)**. Serious adverse events were more frequent with glucocorticoids than with placebo but occurred primarily among those receiving full rather than reduced doses of glucocorticoids. Based on these results, **we now suggest use of glucocorticoids in most high-risk patients with IgA nephropathy**. [2]

Topiramate (Topamax)®: start of safety review triggered by a study reporting an increased risk of neurodevelopmental disabilities in children with prenatal exposure

We have initiated a new safety review into topiramate as a result of an observational study reporting an **increased risk of neurodevelopmental disabilities in children whose mothers took topiramate during pregnancy.**

Topiramate is known to be associated with an increased risk of congenital malformations and effects on fetal growth if used during pregnancy. Continue to counsel patients who can become pregnant on the known and emerging risks of topiramate for an unborn baby and on the need to use effective contraception throughout use.

Prescribers were reminded to:

- Not to prescribe topiramate during pregnancy for migraine prophylaxis.
- Ensure any patients of childbearing potential know to use highly effective contraception throughout treatment and the reduced effectiveness topiramate may have on steroidal contraceptives, including oral contraceptives.
- Counsel patients on the importance of avoiding pregnancy during use.[3]

Vitamin D supplementation in community-dwelling individuals did not show a fracture benefit (August 2022)

In the VITAL trial, in which 25,871 community-dwelling men and women (mean age 67 years) were randomly assigned to vitamin D (2000 units daily) or placebo, the rate of total fractures (5.9 versus 6 percent), nonvertebral fractures (5.6 versus 5.7 percent), and hip fractures (0.44 versus 0.43 percent) was similar in the two groups . The participants were **not** selected on the basis of vitamin D deficiency, low bone mass, or osteoporosis. The mean 25-hydroxyvitamin D level (in a subset of participants) was 30 ng/mL (75 nmol/L), approximately 10 percent of the total group had a history of a fragility fracture, and approximately 5 percent were taking osteoporosis medications. Community-dwelling adults who are getting adequate calcium and vitamin D from dietary intake (and sun exposure) do not need to take additional supplements. Vitamin D supplementation is typically suggested as part of the treatment of osteoporosis, particularly for patients who are receiving osteoporosis medications.[4]

References:
1. Duration of antibiotics following lower extremity amputation (June 2022), accessed online via uptodate.
2. Oral glucocorticoids for immunoglobulin A (IgA) nephropathy, accessed online via uptodate.
3. MHRA Drug Safety Update , July 2022 https://products.mhra.gov.uk
4. Vitamin D supplementation in community dwelling individuals, accessed online via www. uptodate.com

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