We call our nipple ointment “all purpose” since it contains ingredients that help deal with multiple causes or aggravating factors of sore nipples. “Good medicine” calls for the single “right” treatment for the “right” problem, true enough, but mothers with sore nipples don’t have time to try out different treatments that may or may not work, so we have combined various treatments in one ointment. Of course, preventing sore nipples in the first place would be the best treatment and often adjusting how the baby takes the breast can do more than anything to decrease and eliminate the mother’s nipple soreness (See information sheets When Latching, Sore Nipples as well as the video clips at the website nbci.ca.

The APNO contains:

1. **Mupirocin 2% ointment.** Mupirocin (Bactroban is the trade name) is an antibiotic that is effective against many bacteria, particularly Staphylococcus aureus including MRSA (methicillin resistant Staphylococcus aureus). Staphylococcus aureus is commonly found growing in abrasions or cracks in the nipples and probably makes worse whatever the initial cause of sore nipples is. Interestingly, mupirocin apparently has some effect against *Candida albicans* (commonly, but inaccurately called “thrush” or “yeast”). Treatment of sore nipples with an antibiotic alone sometimes seems to work, but we feel that the antibiotic works best in combination with the other ingredients discussed below. Although mupirocin is absorbed when taken by mouth, it is so quickly metabolized in the body that it is destroyed before blood levels can be measured. Moreover most of it gets stuck to the skin so that very little is taken in by the baby. Thus it is safe for the baby to swallow if indeed he gets any.

2. **Betamethasone 0.1% ointment.** Betamethasone is a corticosteroid, which like all corticosteroids, decreases inflammation. A large part of the pain mothers experience when they have sore nipples is due to inflammation. The redness of the nipples and areolas is another sign of inflammation. By decreasing the inflammation, the APNO also decreases the pain the mother feels. Most of the betamethasone in the ointment is absorbed into the skin by the mother, so that the baby takes in very little.

3. **Miconazole powder to a final concentration of 2%.** Miconazole is an antifungal agent. It is very effective against *Candida albicans*. We feel the concentration of 2% miconazole is a good one, but because the pharmacist adds a powder to the above two ingredients, s/he can change the concentration of miconazole so that it can be increased to 3% or even 4% or decreased to less than 2%. We feel 2% is the best concentration for most situations. Fluconazole powder to 2% may be substituted for miconazole and so can clotrimazole powder to 2%, but we believe that clotrimazole (Canesten) irritates more than the other drugs in the same family. Miconazole cream or gel cannot be substituted for miconazole powder as the compound will usually separate. If you live in a place where miconazole or any of the above mentioned drugs (fluconazole, clotrimazole) are not easily available as powders to be mixed into the APNO, it is probably better to use only the mupirocin and betamethasone ointments mixed together than add a cream or gel or nystatin ointment for example.

By using a powder, the concentration of the other two ingredients is not as decreased as they would be if another ointment were used for the anti-fungal agent (for example, nystatin ointment). Thus, in the above preparation the concentration of the betamethasone become 0.05% (due to combination with the mupirocin) and the mupirocin concentration is decreased to 1%. Note that nystatin ointment, which we used to use and which decreases the concentration of the other ingredients, is far inferior to miconazole and also tastes bad.

I write the prescription this way.
1. Mupirocin ointment 2%: 15 grams

2. Betamethasone ointment 0.1%: 15 grams

3. To which is added miconazole powder to a concentration of 2% miconazole

Total: about 30 grams combined

Apply sparingly after each feeding. Do not wash or wipe off

NO SUBSTITUTIONS

If possible, try to get the prescription filled at a compounding pharmacy. At least they will not tell you there is no such thing as miconazole powder. You can find a list of compounding pharmacies in Canada and the US and maybe some other countries by going to the website iacprx.org. Click “For Patients, Pet Owners” in the red box on the left side of the page, then click “Finding a Compounding Pharmacist Near You”. You will need to sign in and then you can find your nearest compounding pharmacy. Canadians: make sure that you leave a space between the two sets of 3 letters in the postal code: M2K 2E1, not M2K2E1.

How do I use the ointment?
1. Apply it sparingly after each feeding. “Sparingly” means that you apply just enough to make the nipples and areola glossy or shiny.

2. Do not wash it off or wipe it off, even if the baby comes back to the breast earlier than expected.

How long can I use the ointment?
Somehow the “word” has gotten around to use the ointment for only two weeks. This is unfortunate since many mothers are getting so much better, but not pain free, by the time they believe they have to stop the ointment. Apparently pharmacists have said that the steroid in the ointment will cause “thinning” of the skin. This is a concern with any steroid one puts on the skin, but in our experience this has not occurred with our ointment and many mothers have used it for months.

However, any drug should be used for the shortest period of time necessary, whether it’s taken by mouth or put on the skin or any other way it’s being given. The same is true for our ointment. There is no problem using the ointment for 2 or 3 or even more weeks, but if you still need the ointment after two or three weeks, or you pain returns after you have stopped it, you should get “hands on” help again to find out why and fix the way the baby is taking the breast, for example. Indeed, the most important feature of decreasing nipple pain is getting the “best latch possible”. Many teach a method of latching on that is different from what we teach. Naturally, based on our experience and from feedback, we think we have an effective and successful method. See the information sheet When Latching, and watch the video clips at the website and nbci.ca.

Questions? First look at the website nbci.ca or drjacknewman.com. If the information you need is not there, go to Contact Us and give us the information listed there in your email. Information is also available in Dr. Jack Newman’s Guide to Breastfeeding (called The Ultimate Breastfeeding Book of Answers in the USA); and/or our DVD, Dr. Jack Newman’s Visual Guide to Breastfeeding (available in French or with subtitles in Spanish, Portuguese and Italian); and/or The Latch Book and Other Keys to Breastfeeding Success; and/or L-eat Latch and Transfer Tool; and/or the GamePlan for Protecting and Supporting Breastfeeding in the First 24 Hours of Life and Beyond.

To make an appointment online with our clinic please visit www.nbci.ca. If you do not have easy access to email or internet, you may phone (416) 498-0002.