

Drug intolerance and chemical sensitivity



People with MCS commonly have reactions or other difficulties with pharmaceutical drugs. It can be the drug itself or the additives (called excipients). We describe how some people cope.

Keywords: pharmaceuticals, drugs, drug intolerance, anesthesia, excipients, preservatives, inactive ingredients, multiple chemical sensitivity, MCS, environmental illness

Pharmaceutical drugs are chemicals that usually have a beneficial effect on the human body. However, as with so many other chemicals, they can also cause problems for people with multiple chemical sensitivities. (MCS)

This is noted by several scientists (Randolph 1990; Heilbrun 2015; Niedoszytko 2006; Swoboda 2006; Miller 1999; Ziem 1992)

Surveys of people with chemical sensitivities document widespread intolerances and adverse effects from prescription drugs (Palmer 2020; Heilbrun 2015; Niedoszytko 2006; Gibson 2003; LeRoy 1996).

MCS itself is a poorly understood illness, which may actually be a class of illnesses. This can explain why people with MCS can react so differently to the same drug, with some having no effect, while others must use a very low dose, and yet others have a normal response.

Unfortunately, there is virtually no funding available for scientific studies on MCS, and little is known about these problems.

“Inactive” ingredients

The drug itself is usually a small part of what is in a pill, syrup, cream or injection. The bulk is actually a combination of these chemicals:

- Preservatives
- Fillers
- Binders
- Lubricants and antiadherents
- Coatings
- Sorbents
- Colors
- Flavors and sweeteners
- Fragrances

The pharmaceutical industry refers to them as “excipients,” while the labels on packaging list them as “inactive ingredients,” if they list them at all.

These extra ingredients are there for a variety of reasons that are unrelated to the drug itself. That is why they are considered “inert,” even though they can make some people sick.

The preservatives are there to extend the shelf life of the drug and avoid the inconvenience of having to store it in a refrigerator.

The fillers, binders, lubricants, and antiadherents make it easier to produce the pill in a factory. They also make the pill larger so it is easier to handle, such as for arthritic fingers.

The coating holds the pill together and protects it against moisture in the air. It can also make it easier to swallow a large pill. Some coatings delay when the drug is released in the body, such as to protect it against stomach acids and enzymes.

The sorbents are there to slow down the pill’s absorption of moisture.

The coloring helps identifying the pill. This helps staff notice screwups at the pharmacy and for people taking multiple medications.

Flavors and sweeteners are mostly used to overpower an unpleasant taste or smell, so people are more willing to take the drug. They are especially common in drugs intended for children.

Fragrances serve no legitimate purpose at all, but are commonly added to creams. In some countries they are also added to anesthetic gases used to sedate people during surgery.

These “inert” ingredients can cause problems for people who have gluten intolerance, lactose intolerance, food allergies, dye intolerances, MCS, etc (Reker 2019; Inomata 2006; AAP 1997; Andreozzi 2019; Caballero 2020).

Dr. Theron Randolph noted that when he tested some of his MCS patients with pure versions of drugs they were reactive to, they were fine. The problems were not the drugs themselves (Randolph 1990).

Liquid pharmaceuticals usually contain a preservative. In eye drops, that may cause irritation of the eye. When preservatives are injected that can cause a range of symptoms.

Allergy shots almost always contain phenol as the preservative, which is reported to be a common problem for people with MCS (Randolph 1990; Evans 2010).

What to do

The traditional hard pill tends to have the most additives, simply because of how it is manufactured and stored. People with MCS tend to prefer the capsules, or other types, for that reason.

Some people experiment with different brands of the same drug to find the one with the most tolerable combination of ingredients. They may find the name-brand version is the best, which can be costly, and cause problems with the insurance company. A friendly doctor may be willing to write the prescription specifying a specific brand is needed.

People have had trouble when their pharmacy stopped carrying the brand that worked the best, or the manufacturer stopped making it.

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A compounding pharmacy gets the drug in its pure form and then makes a batch for you. This gives you a lot more control over what is actually in the pill or cream. If you are willing to store the drug in the refrigerator, they should be able to produce it without preservatives.

But compounded drugs may not be covered by your insurance plan, and they cost more than regular drugs.



A few drugs are available without preservatives.

In a few rare cases there are drugs readily available in versions with fewer additives. We've seen dye-free antihistamines and preservative-free eye drops.

It is tempting to order the drug in capsules and then take the powder out of the capsule and pour it into a drink. This to avoid ingesting the dye and capsule material. Check with a pharmacist first, as the capsule may be needed to protect the drug against stomach acids.

Lower doses

Some people with MCS report that they need a much smaller dose of a drug. It may be their body breaks down the drug slower than normal, so to compensate they need a smaller dose.

You may want to discuss this with your doctor before experimenting yourself.

A compounding pharmacy can produce drugs in any dose strength. Or you could cut a pill using a knife.

Antihistamines

Most people with MCS also have allergies, sometimes severely so. There are a great many antihistamine drugs available, but they are often of no help.

It is commonly reported that the first few times an antihistamine is tried it clearly helps, but with continued use it quickly loses its effect.



Antihistamines of all types are often of little or no help against severe allergies.

Abstaining from using the antihistamine for days or months may restore its efficacy, but it is again shortlived. It may only work for one day, before again losing its effect.

There are many such stories in the MCS community, though it has not been formally studied.

Anesthesia

Anesthetic drugs used during surgery is a particular concern. They are either inhaled through a mask or given intravenously.

Besides tolerating the drugs themselves, there can also be problems with additives, including frivolous additives. Inhaled anesthetics sometimes contain a fragrance and the plastic mask can also cause symptoms (Sato 2019; Cooper 2007).

The intravenous anesthetics can contain various preservatives (Fisher 2008).

The problems vary by country. We talked to a Swedish anesthesiologist who said neither fragrances nor preservatives are in any of the anesthetic drugs used in Sweden. Unfortunately, many countries are not that enlightened, such as Australia (Fisher 2008).

There is very little about this issue in the medical literature. The only actual study we found was by an Australian anesthesiologist (Fisher 2008).

Fisher studied 27 cases of MCS or CFS/ME who underwent surgery. He found that they had a “high incidence of problems” caused by the anesthetic drugs, which could linger for days, but “rarely” needed the help of a doctor.

He believes MCS and CFS/ME is all psychosomatic, has no sympathy for them, and does not call for ending the use of these frivolous fragrances.

Supplements

Nutritional supplements can have the same problems as pharmaceutical drugs. The quality can also vary dramatically, as some brands have good quality control while others have virtually none.



The better brands tend to use capsules instead of pills.

Detoxification

When a drug enters the bloodstream it is broken down by the body and then excreted. This is handled by the liver, kidneys, and other parts of the body, depending on what kind of drug it is. This is the same mechanism that also breaks down other chemicals, whether they are alcohol, caffeine, or inhaled paint thinner.

How fast people break down chemicals vary enormously. Some people can metabolize caffeine forty times faster than others (Yang 2010), and anti-depressant drugs ten times faster than others (Kirchheiner 2007).

There have been a few studies on how people with MCS metabolize drugs (such as McKeown-Eyssen 2004), but much more is needed.

Not just MCS

Problems with drugs are also common among people with mast cell activation disease (Molderings 2016).

There is also a condition called Multiple Drug Intolerance Syndrome (Hisham 2014).

Both of the above may turn out to be related to MCS, or even parts of it, but we presently don't know.

Cancer patients undergoing chemotherapy frequently report brain fogs that are very similar to what people with MCS get from chemical exposures.

Talking to your doctor

Talking to your doctor, dentist, surgeon, or anesthesiologist about the drugs they prescribe can be tricky. Drugs are a central part of what they do, so asking questions can easily make them defensive.

They may not understand that for someone with MCS, these questions are important. They may think you are overly fussy or anxious, especially before surgery. They may ignore you, or brush you off, or make some arrogant statement.

The Australian anesthesiologist who was dismissive of MCS suggests “humoring” people to keep the peace (Fisher 2008).

They are not trying to be mean, they are just not used to being questioned, so don't get mad but calmly explain that you do have a legitimate concern. The soft approach usually works best, a confrontation will rarely work and can result in the doctor telling you to go somewhere else. If the doctor still refuses to level with you, someone else may be the better option, though your health plan may not allow it.

More information

More articles about MCS and how to live with it on www.eiwellspring.org.

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