Greetings,

For those who are suffering from an adverse reaction to a Fluoroquinolone - Ciprofloxacin/Cipro, Levofoxacin/Levaquin, Moxifloxacin/Avelox and Ofloxacin/Floxin - we offer help, support, advocacy and information. Though each of us is different, in our reactions, what helps us, what hurts us, etc., we are united in support of those seeking answers to the many questions that surround Fluoroquinolone Toxicity.

A few of us have been fortunate in finding doctors that have diagnosed us with Fluoroquinolone Toxicity Syndrome, or Fluoroquinolone reaction, while many others are still searching for that one doctor who will make that diagnosis.

We hope to assist you in understanding what is happening to you through files on our website, and in our groups. We are here to support you in your journey back to health.

Attached to this note are 3 documents that you can print out and take with you to your next appointment with your doctor to review. We have intentionally limited the number of pages so that your doctor will be more likely to review it quickly during your office visit.

The attached documents include:

1. Dear Doctor Letter written by Doctor Todd Plumb
2. Dr. Jay Cohen 2001 study on Fluoroquinolones
3. A drawing of the human body that you can use to help you gather your thoughts, pinpoint what areas you are having symptoms, and write down what those symptoms are.
Dear Doctor,

As you are probably aware, the fluoroquinolone class of antibiotics is useful for certain serious infections. Unfortunately, fluoroquinolones also have a long history of serious adverse drug reactions, many of them long term. (1) As a consequence of these reactions, several of these drugs have been removed from clinical practice or their use severely restricted. Besides the severe life threatening immediate reactions, those of a more chronic nature may occur.

The spectrum of these adverse reactions is extremely broad. Patients suffering from these reactions are often misdiagnosed, referred for a psychiatric consult or even unfairly labeled as “difficult patients.”

Many physicians have not been properly educated about the severe nature of these chronic adverse reactions, some of which result in life-long disabilities. Post-marketing studies of several fluoroquinolones have shown an incidence of adverse reactions much higher than were originally reported in pre-clinical studies. (1,2,3)

You are probably aware that the fluoroquinolones are eukaryotic DNA gyrase and topoisomerase inhibitors very similar to many antineoplastic agents. Because of their similar mechanisms of action, it’s no surprise that fluoroquinolones and many antineoplastic agents share similar toxicity profiles. Studies have even been conducted using fluoroquinolones to inhibit neoplastic chondrocyte growth in chondrosarcoma. (4)

There are many patients who have a syndrome of associated symptoms that include, but are not limited to: CNS agitation, depression, insomnia, new-onset anxiety and panic attacks, and even elevated intracranial pressure and visual abnormalities. They may also present with peripheral neuropathy usually of the small fiber type with temperature and pain sensory aberrations, but also often involving larger sensory and motor nerves. Spontaneous muscle activity with fasciculations, myokymia and myclonic jerks may also occur. Many have musculoskeletal damage with degeneration of cartilage and tendons often leading to tendon rupture and severe ongoing musculoskeletal pain long after therapy has been discontinued. (1,2,3,4,5,6,7,8)

This complex symptomatology does not usually resolve after discontinuation of the inducing fluoroquinolone and may in fact worsen. Many patients go on to have disability that may persist for years. (1) Unfortunately, such patients are often seen by many physicians from multiple specialties who, given the complex symptomatology, fail to recognize a unifying diagnosis.

The mechanism of injury is not fully apparent, but several studies have been conducted and researchers have implicated the following possible mechanisms:
1. Inhibition or disruption of the CNS GABA receptor. (9)

2. Depletion of magnesium and disruption of cellular enzymatic function. (10)

3. Disruption of mitochondrial function and energy production. (11,12)

4. Oxidative injury and cellular death. (14)

This seems to be a functional disorder and structural abnormalities are not usually seen on radiological studies. (13) Patients may have abnormal EMG/NCV studies, abnormal skin punch neurologic density and morphology, abnormal vasomotor and sudomotor function on autonomic testing, and abnormal degeneration of tendons and cartilage on MRI. (13)

There may be a large number of these patients with coexisting endocrine abnormalities including: antithyroid antibodies and abnormal thyroid function, abnormal adrenal function with either hyper or hypocortisolism, hypogonadism, hypo or hyperglycemia and possibly impaired pituitary function. (13)

Most patients suffering from these side effects have a very clear onset of symptoms temporally related to a course of fluoroquinolone antibiotic. (13) They were often given the fluoroquinolone in conjunction with a corticosteroid or NSAID. Both of these classes of medications are associated with an increased incidence of adverse drug reaction from fluoroquinolones. (10,13)

As of yet no scientifically proven effective treatment is known, however patients will definitely benefit from your caring support and appropriate informed care. Of course, other diseases with similar symptoms need to be carefully ruled out.

There exists a large community of these patients who share information on the World Wide Web. Their numbers grow as the prescription of fluoroquinolones increases. Many of these patients are professionals like myself who have been affected by these drugs. Thank you for your time and consideration.

Todd R. Plumb MD

References:


3. Shepard CW et al; Antimicrobial Postexposure Prophylaxis for Anthrax: Adverse Events and Adherence Emerging Infectious Diseases J Vol. 8, No. 10, October 2002

4. Fox EJ et al; The effects of ciprofloxacin and paclitaxel on metastatic and recurrent chondrosarcoma COMMUNITY ONCOLOGY November/December 2005
5. Physicians Desk Reference 2006


7. FDA Medical Bulletin * October 1996 * Volume 26 Number 3. Reports of adverse events with fluoroquinolones


Levaquin and Cipro Reactions

Cipro and Levaquin are antibiotics, drugs used to fight infections. The fluoroquinolone (FQ) family of antibiotics includes:

- Avelox (moxifloxacin)
- Cipro (ciprofloxacin)
- Factive (gemifloxacin)
- Floxin (ofloxacin)
- Levaquin (levofloxacin)
- Noroxin (norfloxacin)
- Tequin (gatifloxacin)

Levaquin and Cipro are the most famous because they are the best-sellers. FQs are effective for fighting severe, life-threatening infections, but too often they are prescribed for minor problems such as sinus, bladder, or prostate infections. The results can be devastating.

In 2001, Dr. Cohen published a ground-breaking article* on the severe and often disabling reactions some people sustained while taking Levaquin, Cipro, or another FQ antibiotic. Dr. Cohen says, "It is difficult to describe the severity of these reactions. They are devastating. Many of the people in my study were healthy before their reactions. Some were high intensity athletes. Suddenly they were disabled, in terrible pain, unable to work, walk, or sleep."

The 45 subjects in Dr. Cohen's study reported the following side effects*.

<table>
<thead>
<tr>
<th>Peripheral Nervous System</th>
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<tbody>
<tr>
<td>Tingling, numbness, pricking, burning pain, pins/needles sensation, electrical or shooting pain, skin crawling, sensation, hyperesthesia, hypoesthesia, allodynia (sensitivity to touch), numbness, weakness, twitching, tremors, spasms.</td>
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<tr>
<th>Central Nervous System</th>
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<tr>
<td>Dizziness, malaise, weakness, impaired coordination, nightmares, insomnia, headaches, agitation, anxiety, panic attacks, disorientation, impaired concentration or memory, confusion, depersonalization, hallucinations, psychoses.</td>
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Musculoskeletal
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<th>Special Senses</th>
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<td>Diminished or altered visual, olfactory, auditory functioning, tinnitus (ringing in the ears).</td>
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<th>Cardiovascular</th>
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<td>Tachycardia, shortness of breath, hypertension, palpitations, chest pain.</td>
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<tr>
<th>Skin</th>
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| Rash, swelling, hair loss, sweating, intolerance to heat and
cold. |

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<tr>
<th>Gastrointestinal</th>
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<tr>
<td>Nausea, vomiting, diarrhea, abdominal pain.</td>
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Many subjects reported multiple side effects from multiple systems. Dr. Cohen found that 36 (80%) subjects had severe reactions. Many were still disabled years after taking a FQ. Of the 45 subjects, 33 (74%) had taken Levaquin, 11 (24%) Cipro.

According to the reports of FQ patients, many doctors are poorly informed about the risks of FQ antibiotics. Often, when a patient complains of side effects with a FQ, doctors ignore the complaint or deny that the FQ could cause the problem. Many doctors have not seen the warnings in the FQ package inserts, not even the large, black-bordered warnings recently mandated by the FDA.

Some doctors do care. They run all kinds of tests on patients injured by FQs. Test results are usually normal, although MRIs may be positive in people with FQ-related tendon injuries or rupture. Ultimately, FQ patients are left with little information and a few pills for pain.

Over the years, Dr. Cohen has been contacted by hundreds of people with FQ-reactions. He has provided information to help them understand the reactions they have sustained. He has provided direction in how to obtain help, both medical and legal. Although there is no antidote for FQ reactions, there are things people can do to help control their symptoms. Dr. Cohen is an expert in the use of many prescription drugs and natural supplements that are used to help people with FQ reactions.

Dr. Cohen provides office or telephone consultations for people sustaining FQ reactions. If you would like to schedule an appointment, please call the office at 858-345-1760.


Dr. Cohen’s article was first published in October 2001, during the anthrax scare. The article triggered a national debate about Cipro’s safety. These concerns prompted the U.S. Centers for Disease Control to remove Cipro as its first-choice antibiotic for treating anthrax exposure.

View all of Dr. Cohen’s medical articles, consumer publications, and presentations.