

Neuroleptic Awareness

Part 3

Neuroleptic Physical Adverse Drug Reactions

Facts about or Adverse Drug Reactions or “Side Effects”

Neuroleptic *adverse reactions* or *side effects* are caused by the way the drug works in the brain and are therefore **the main *central* effects of neuroleptics.**

These can be defined as IATROGENIC or DRUG INDUCED.

- Pharmaceutical drug trials are designed so that it is unlikely that all the potential adverse neuroleptic effects are listed on the pharmaceutical literature inside each packet of medication. (Witte et al 2002).
- Adverse neuroleptic effects can be due to people's inability to metabolise psychotropic medications (Schillevoort et al 2003); it is akin to an allergy.

**60% of patients experience severe/very severe side effects.
(Rogers 1993).**

Physical Functions of Neurotransmitters:

Many people are aware neuroleptics have an impact on the dopamine neurotransmitter. What is relatively unknown is that neuroleptics impact on other neurotransmitters i.e. serotonin, adrenaline, noradrenaline and acetylcholine.

Dopamine, adrenaline, noradrenaline and acetylcholine neurotransmitters play an important role in *all* our physical body functions:

- The brain is the control centre for our natural physical health and for the essential healthy functioning of the cardiovascular and respiratory systems.
- **Neurotransmitters** in the brain control body movements, muscle strength, memory and sexual health.
- They enable the natural regulation of fat and sugar and sleep patterns.
- **Neurotransmitters** enable us to adapt and react in the face of danger.

**Unnatural interference with
neurotransmitters by neuroleptics causes
deterioration of physical health.**

NEUROLEPTIC IATROGENIC ADVERSE REACTIONS EFFECTS ON BODY ORGANS

Sexual Disability (Dysfunction) for Both Sexes

- Growth of male breasts (Gynaecomastia)
- Secretion of breast milk in men and women (Galactorrhoea)
- Lack of sexual feeling (anorgasmia)
- Ejaculation into the bladder. The bladder sphincter does not function properly (Retrograde Ejaculation).
- Sterility
- Birth defects because of damage to DNA/sperm.
- Pituitary tumors

Metabolic Disorders

- **OBESITY** excessive abdominal fat (Cortisolaemia)
- **MASSIVE WEIGHT GAIN**
- **HIGH CHOLESTEROL**
- **HYPERPROLACTINAEMIA** (High levels of prolactin hormone)
- **DIABETES**
- **OSTEOPOROSIS** (Thinning bones leading to pain and fractures)
- **THYROID DISORDERS**
- **HYPOTHERMIA/HYPERTHERMIA** (Dysregulation of temperature with possible death from heat stroke)

Metabolic Disorders Progress to Small and Large Artery Diseases

HEART FAILURE and HEART ATTACK

HIGH BLOOD PRESSURE - hypertension

BLOOD CLOTS - Deep Vein Thrombosis/Embolism

- Potentially fatal if a bit breaks off and lodges in the lungs.

STROKES - Cerebro-vascular Disease.

- Risk is higher with atypical antipsychotics.

ADDITIONAL NEUROLEPTIC IATROGENIC ADVERSE REACTIONS

Adverse reactions	Adverse reactions
LOWERED WHITE BLOOD CELL COUNT (AGRANULOCYTOSIS) <ul style="list-style-type: none"> • Potentially life threatening with Clozapine 	LIVER DAMAGE
VASCULAR DEMENTIA <ul style="list-style-type: none"> • Neurodegenerative changes 	KIDNEY FAILURE
PREMATURE AGEING and PREMATURE DEATH <ul style="list-style-type: none"> • Associated with high neuroleptic dose & chronic exposure • Loss of muscle power and weakness. 	URINE RETENTION <ul style="list-style-type: none"> • Difficulty urinating • Bladder distension
RESPIRATORY DISEASE and RESPIRATORY ARREST <ul style="list-style-type: none"> • A build up of lung mucous can lead to Pneumonia. 	CONSTIPATION
SUNBURN <ul style="list-style-type: none"> • Increased Sun Sensitivity 	BLOCKED NOSE
OCCULAR <ul style="list-style-type: none"> • Cataracts • Oculogyric Crisis: painful eyeball rotation 	

NEUROLEPTIC MALIGNANT SYNDROME (NMS)

NMS has similar symptoms to Encephalitis, a viral brain inflammation.

High temperature	Sweating
Altered mental state	Seizures
High Blood Pressure: Hypertension	Irregular heart beat
Low Blood Pressure: Hypotension	Kidney (Renal) failure
Rapid heartbeat: Tachycardia	Respiratory failure
Tremor	Sialorrhea: drooling
Incontinence	Dysarthria: difficulty in speaking
Elevated creatinine phosphokinase (CPK) enzymes and white blood cells	Muscle Rigidity

NEUROLEPTIC INDUCED MOVEMENT DISORDERS

All the following neuroleptic adverse reactions are socially stigmatising.

AKATHISIA Inability to keep still, inner restlessness and irritability.

PARKINSONISM known as **Extra Pyramidal Symptoms (EPS)**

These manifest in the same way as they do in Parkinson's Disease:

- Body tremor, flat, vacant expression, zombie appearance, excessive salivation (unable to swallow)
- Bradykinesia, the slowing down of large muscle movement so that the patient appears stupid and/or clumsy.

Anti Parkinsonism Drug Side Effects

To ameliorate **EPS** anti-cholinergic drugs are used and these have their own side effects in addition to neuroleptic ones.

Anti Parkinsonism Drug Side Effects:

- Blurred vision
- Headaches
- Dry eyes
- Dry mouth
- Increased heart rate
- Difficulty in urinating
- Constipation
- Memory impairment
- Impaired Concentration
- Confusion
- Attention deficit

Polypharmacy i.e. use of more than one drug at a time muddles and exacerbates adverse effects

NEUROLEPTIC INDUCED TARDIVE DYSKINESIA (TD)

TD is due to Target Organ Toxicity causing irreversible damage to the brain cells. Anti-cholinergic drugs make **EPS** worse.

TD is grossly disfiguring and includes:

- The lower jaw moves in sideways movement.
- The lips become pursed with the patient sucking and smacking the lips.
- Blowing in and out of the cheeks.
- Facial grimacing.
- Abnormal tongue movements i.e. the tongue quivers – protrudes.
- Finger movements as though an invisible guitar is played.
- Body actions are involuntary, potentially irreversible and there is no proven treatment.
- Dementia is associated with Tardive Dyskinesia

NEUROLEPTIC INDUCED TARDIVE DYSTONIA

Dystonia seems to be caused by over-activity in the brain, particularly in the basal ganglia, thalamus, and cerebral cortex:

- Sustained painful muscle spasms
- Causes involuntary movement and abnormal posture
- Torticollis - head and neck are twisted to one side
- Retrocollis - head and neck are pulled back between the shoulder blades
- Blepharospasm - eyelids are forcefully squeezed shut
- Excessive arching of back. (Like decerebrate rigidity in brain injuries)

**Tardive Dyskinesia, Akathisia and Extra
Pyramidal Symptoms are frequent
combinations that make patients look ‘odd’,
making them extremely vulnerable in the
public environment.**

*These effects are not conducive to a patient’s
full recovery.*

SEROTONIN SYNDROME

This is a potentially fatal condition resulting from excessive serotonin levels.

This can be caused by starting or withdrawing from neuroleptics, the combining a neuroleptic with an antidepressant, or a sudden increase in antidepressant dose.

Signs and Symptoms include:

Restlessness, hallucinations, tremor, loss of coordination, fast heartbeat, increased body temperature, fast changes in blood pressure, overactive reflexes, diarrhoea, seizures, coma, nausea, vomiting....

A Comparison of Typical and Atypical Neuroleptics

There are roughly 14 different *Typicals* that deplete the brain's neurotransmitter dopamine and increase acetylcholine in the brain.

There are roughly 12 different *Atypicals* that target the serotonin and adrenaline neurotransmitters as well as other vital neurotransmitter systems. There are ***over 3 times as many reported adverse effects*** as there are for the older *Typicals*.

This reflects the fact that ***Atypicals are therefore more toxic***. They also ***cost more than ten times as much*** as most older *Typical* drugs.

Evidence of Neuroleptic Structural Brain Damage

There are 25 medical articles on brain damage associated with neuroleptic drug treatment compiled by the late Loren Mosher, MD. <http://www.moshersoteria.com/articles/biopsychiatric-model/>

Researchers in Denmark found a dose dependent association with brain shrinkage, estimating the risk of atrophy to be 6.4% for each additional 10 grams of chlorpromazine, or other neuroleptic in terms of equivalent dose.

A.L.Madsen et al: (1998) “Neuroleptics in progressive structural brain abnormalities in psychiatric illness.” The Lancet, 352 (9130) 784

Evidence of Neuroleptic Structural Brain Damage

Neuroimaging Studies of Humans

Following one year of neuroleptic therapy, patients demonstrated an 8% increase in lateral ventricle volume, a 1% reduction in total brain volume, and a 3% reduction in whole brain grey matter.

Source: Jackson, Grace E. [*Rethinking Psychiatric Drugs: A Guide for Informed Consent*](#).
Bloomington, IN: Author House, 2005.

Signs of brain atrophy or shrinkage are due to exposure to neuroleptics, and not as doctors have mistakenly believed to be a sign of “Schizophrenia”.

Neuroleptic Induced Brain Changes and Poor Outcomes

Neuroleptic brain changes were significant statistically, being clinically related to poor outcomes in terms of psychotic symptoms, physical health, social intimacy, and independence. The grey matter changes corresponded to cumulative neuroleptic dose.

Source: Jackson, Grace E. [*Rethinking Psychiatric Drugs: A Guide for Informed Consent*](#).
Bloomington, IN: Author House, 2005.

Numerous Physiological Causes of Hallucinations

Organophosphate Poisoning (pesticides and fertilizers)	Vitamin Deficiencies: B3 Pellagra, Folic Acid/B ₁₂
Drug Intoxications: All Psychiatric Drugs and Street Drugs	Antibiotics and other Prescription Medicines
Chronic Candida Infection	Sleep Deprivation
Toxins: Heavy Metal Toxicity	Hyperthyroidism
Porphyria	Gluten Intolerance
Viral Illnesses	Dementia
Wilson's disease	Herpes Encephalitis
Picks Disease	Huntingtons' Disease
Endocrine Disorders	Hypoglycaemia
Pyroluria	Homocysteinuria

Because these causes are relatively unknown, patients are likely to be diagnosed with “schizophrenia” if they present with hallucinations in these conditions.

Neuroleptic Withdrawal Effects

Neuroleptic withdrawal effects are similar to neuroleptic adverse effects eg. hallucinations, delusions, confusion and disorientation and may cause you or your doctor to believe you are having a relapse.

MIND “Making sense of coming off psychiatric drugs”

http://www.mind.org.uk/help/medical_and_alternative_care/making_sense_of_coming_off_psychiatric_drugs

People may not have experienced some adverse neuroleptic effects while taking medication but may suffer them on withdrawal.

Doctors often mistakenly perceive neuroleptic withdrawal effects as ‘proof of schizophrenia’ and continue prescribing neuroleptics.

CONCLUSION

In UK psychiatry although blood tests may be standard practice for physical metabolic disorders, no matter how many tests are done, the testing does not prevent the development of neuroleptic adverse effects occurring. Additional general medications to treat neuroleptic induced physical problems may be problematic in causing further side effects.

In general medicine, when physical tests depict serious physical health conditions and deterioration of body organs resulting from general medications, the medication would be discontinued. This is safe and caring practice. This practice is in contrast to psychiatry; despite deterioration of body organs i.e. brain, and physical health conditions, neuroleptic medications are still continually prescribed.

In psychiatry where patients are constantly exposed to neuroleptics, being therefore perpetually subject to on-going physical ill health, ethics and morals need to be critically addressed.

BEWARE !

NEVER stop taking a psychotropic drug suddenly. The withdrawal effects can be horrendous!

They are not symptoms of some spurious “disease” returning or worsening as most doctors and nurses will tell you.

For good advice see “COMING OFF.COM” <http://www.comingoff.com/>

The ICARUS PROJECT. “Harm Reduction Guide To Coming Off Psychiatric Drugs & Withdrawal”

<http://theicarusproject.net/downloads/ComingOffPsychDrugsHarmReductGuide1Edonline.pdf>

MIND “Making sense of coming off psychiatric drugs”

http://www.mind.org.uk/help/medical_and_alternative_care/making_sense_of_coming_off_psychiatric_drugs

Useful websites for further information:

Law Project for Psychiatric Rights:

<http://psychrights.org/index.htm>

AHRP Alliance for Human Research Protection

www.ahrp.org

Hearing Voices Network

<http://www.hearing-voices.org/>

**Asylum Magazine for Democratic Psychiatry, Psychology; Radical Approaches
around Mental Health**

<http://www.asylumonline.net/>

The Center for the Study of Empathic Therapy, Education and Living.

<http://www.empathictherapy.org/>

Useful websites for further information:

Safe Harbor

www.alternativementalhealth.com

MindFreedom International: 26 Years of Human Rights Activism in Mental Health <http://www.mindfreedom.org/>

**A critical bibliography of the Biopsychiatric Model. Loren.R.Mosher MD
<http://www.moshersoteria.com/articles/biopsychiatric-model/>**

**Psychiatric Drug Facts with Dr. Peter Breggin
<http://www.breggin.com/>**

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