ლევან ვასაძის პასუხი ქ-ნ მარი კორკოტაძეს

პატივცემულო ქალბატონო მარი,

მივიღე თქვენი გზავნილი, რომელშიც თქვენ უსაფუძვლოდ მდებთ ბრალს, რომ მე თქვენ რატომღაც დაგცინით და მიუხედავად ამისა გადავწყვიტე დავაკმაყოფილო თქვენი მოთხოვნა შესაბამისი ინფორმაციის მოწოდების შესახებ, რადგანაც სწერთ, რომ აუტიზმით დაავადებული ბავშვის დედა ბრძანდებით.

უპირველეს ყოვლისა ნება მიბოძეთ ვუსურვო თქვენს შვილს ჯანმრთელობა, ხანგრძლივი სიცოცხლე და მთელს თქვენ ოჯახს ყოველგვარი ბედნიერება და ღვთის წყალობა.

თქვენ თავადაც სწერთ, რომ აუტიზმის გამომწვევი მიზეზები არ არის მეცნიერთა მიერ ბოლომდე დადგენილი.

ამრიგად ერთნაირი ალბათობით შეგვიძლია ვამტკიცოთ საპირისპირო.

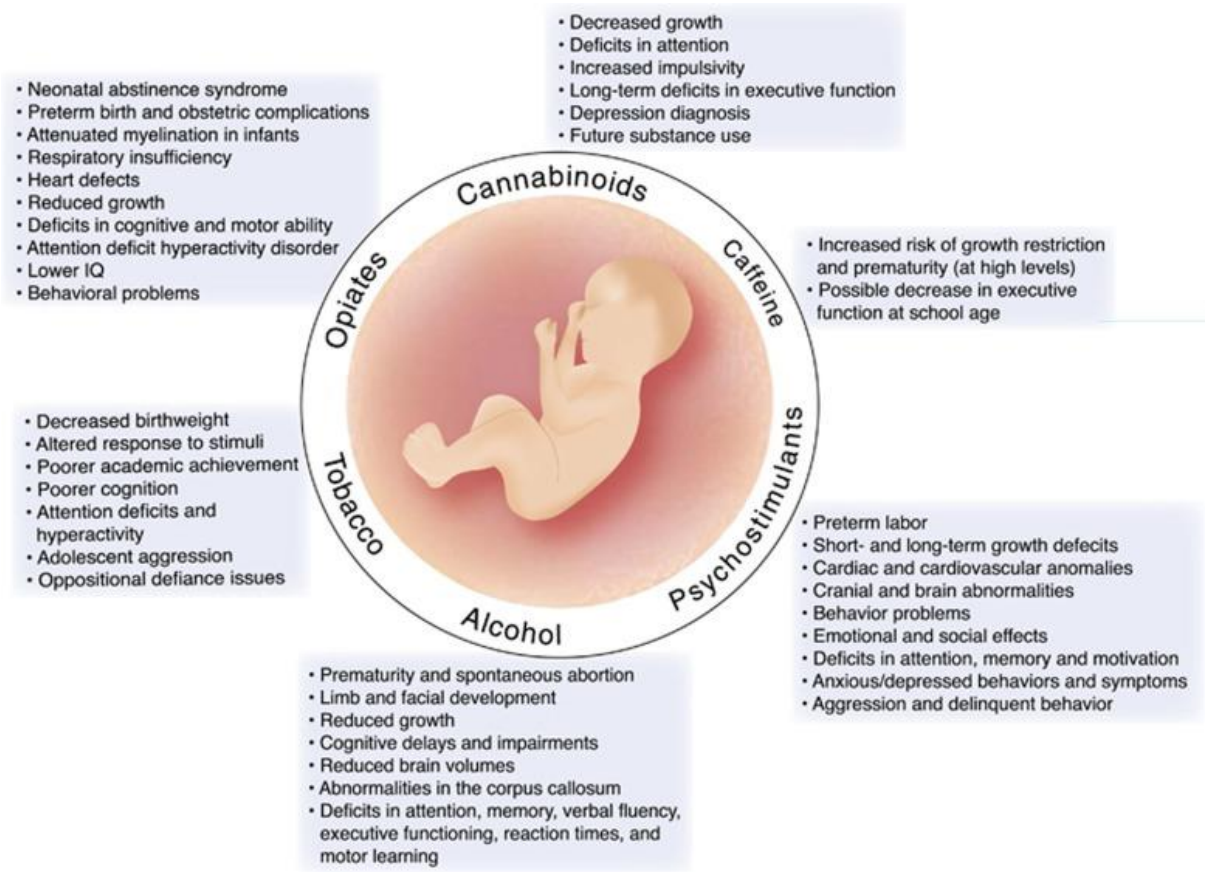
მე დავამატებდი, რომ როგორცა სჩანს არც ისაა ბოლომდე დადგენილი თუ რა არის თავად აუტიზმი, თუმცა რიგი ქცევითი დისფუნქციებისა, პატერნებისა და სინდრომებისა სახელდებულია „აუტისტურად.“

თქვენს თხოვნას რაც შეეხება, გიგზავნით ორ დოკუმენტს.

1. ამერიკელ მეცნიერთა ჯგუფის ჩატარებულ მეტა კვლევას, ანუ რამოდენიმე სამეცნიერო კვლევაზე დაფუძნებულ კონსოლიდირებულ კვლევას, რომელიც ჩაატარეს ემილ როსსმა, დევონ გრეჰემმა, კელი მონიმ და გრეგ სტენვუდმა. კვლევა 2014 წელს გამოქვეყნდა ამერიკის შეერთებული შტატების ავტორიტეტულ, პროფილურ ჟურნალში, რომელსაც ქვია Neuropsycopharmacology და ითვლება ამ სფეროს სპეციალისტების ერთერთ წამყვან რესურსად.

მეცნიერთა ნახსენები კვლევა ეხება სხვადასხვა ტიპის ნარკოტიკების ზეგავლენას ჩანასახზე და უტყუარად ამტკიცებს, რომ ნარკოტიკების მოხმარება უდაოდ იწვევს <u>იმ დისფუნქციებს, პატერნებსა და სინდრომებს, რომლებიც ახასიათებთ მათ შორის აუტიზმის მატარებელი ადამიანების ქცევასაც.</u>

გამარტივებული სქემატური სურათი ჩატარებული კვლევის შედეგად დადგენილი ნარკოტიკების მიერ გამოწვეული სინდრომებისა შეგიძლიათ იხილოთ თანდართულ სქემაზე:



ხოლო თავად კვლევის სრულ ტექსტს, შეგიძლიათ გაეცნოთ შემდგეგი ლინკის მეშვეობით, აშშ-ს ნაციონალური სამედიცინო ბიბლიოთეკის ვებ-გვერდზე:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4262892/

2. გერმანელი მეცნიერი და ექიმი, პროფესორი ფრიდრიხ ჰანსენი, სთვლის რომ ნარკოტიკების მოხმარებასა და ამით გამოწვეული აუტიზმს შორის არსებული კავშირი აშკარაა. მისი ამ თემაზე შეხედულების რეზიუმე თან დართულია წერილის ბოლოს, ბმულში.

რეზიუმეში, სხვა კვლევებსა და დოკუმენტაციასთან ერთად ასევე მოყვანილია ამერიკელ მეცნიერთა ჯგუფის (E. Davis, I. Fennoy, D. Laraque, N. Kanem, G. Brown, and J. Mitchell) კვლევა, რომელსაც ეწოდება Autism and developmental abnormalities in children with perinatal cocaine exposure, რომელიც ასევე ადასტურებს ნახსენებ დამოკიდებულებას.

დასასრულს, სინანულით აღვნიშნავ, რომ ის ფორმა, რომლითაც თქვენ არჩიეთ შემთვის მოგემართათ, მაფიქრებინებს, რომ აქ ეტყობა, სამწუხაროდ, ამაო იქნებოდა ჩემი განმეორებითი მცდელობა კიდევ ერთხელ ამეხსენა თუ რა სახიფათო კანონპროექტს ეძღვნებოდა ჩემი მიმართვა და რომ ის ჩვენი მომავალი თაობის ნარკომანიზაციისაგან დაცვას ისახავდა მიზნად.

ის პირადი შეურაცხყოფა, დაცინვა და უსამართლობა რასაც მე განვიცდი ჩემსავე ქვეყანაში, სიმართლის თქმისათვის, ყველას აშოროს ღმერთმა. მაგრამ ეს არასოდეს მაჩერებდა მე სიმართლის თქმისაგან, როგორც მე ის მესმის, ჩვენი ქვეყნის ინტერესებიდან გამომდინარე.

თქვენ და თქვენს შვილსა და ოჯახის წევრებს კი, კიდევ ერთხელ, ღმერთმა არ მოგაკლოთ ყოველგვარი სიკეთე და ბედნიერება.

პატივისცემით

ლევან ვასაძე

Resume by Dr. Fred Hansen

Substance abuse in Pregnancy and Autism

Substance abuse during pregancy has increased fivefold in the US since the year 2000 (http://americanpregnancy.org/pregnancy-health/illegal-drugs-during-pregnancy/). Research on autism spectrum disorders (ASD) including Asperger syndrom, is still inconclusive and it is safe to assume a multifactorial causation rather than one single cause.

Yet we have evidence that substance abuse is among those risk factors of autism. Pregnant women who use illicit drugs surely increase the risk of having autistic offspring. It appears not enough reasearch has been done in this field so far. What emerges though, is an affinity as shown in several studies between the addictive and the autistic personality, which could be framed as „monomania“ (Greek for obsession), suggesting that just like drug addicts depend on substances, their autism spectrum offspring gets dependant on tangible items, „things“ rather than loved ones. This puts autistic children at higher risk for substance abuse themselves: (https://www.theatlantic.com/health/archive/2017/03/autism-and-addiction/518289/,)

In addition there is **strong evidence for a genetic component**, with higher frequence of autism in identical than in biovular twins. In a family with one autistic child, the chance of having another child with autism is about 5 percent – or one in 20 – much higher than in the normal population. (source: Diagnostic Statistic Manual, Urban & Fisher, see also NICE: /www.nice.org.uk/researchrecommendation/comparative-genomic-hybridisation-array-what-is-the-effectiveness-and-acceptability-of-comparative-genomic-hybridisation-cgh-array-compared-with-current-genetic-testing-in-children-and-young-people-with-identified-autism;). This is the necessary condition for damage wrought by substance abuse during pregnancy, namely in the extremely susceptible first three months representing the early stages of embryonal developement.

Now just as infections (rubella) and alcohol have been shown to cause severe damage to the embryo, the same can be expected for illicit and mostly toxic drugs. „Studies have shown that consumption of illegal drugs during pregnancy can result in miscarriage, low birth weight, premature labor, placental abruption, fetal death, and even maternal death.“(Wiki) Yet there is also hard evidence for the link between illicit drug use in pregnancy - such as heroin and cocain in particular - and children born with autism including severe delay in infants developement (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2637680/):

Abstract (study by US National Institute of Health, NIH)

„Cocaine in all forms is the number one illicit drug of choice among pregnant women. Records of 70 children with cocaine exposure in utero who were referred for developmental evaluation at a large inner-city hospital were reviewed in an effort to determine whether a specific pattern of abnormalities could be discerned. Patients received physical examinations, neurological screenings, and behavioral and developmental assessments based on the Gesell Developmental Inventory, and the Denver Developmental Screening Test. Documentation of specified drug use was obtained by history. Mean age (SEM) at referral was 19.2 (1.7) months. All mothers used cocaine in one of its forms, although polydrug use was common. Growth parameters were low (median = 15th percentile). Significant neurodevelopmental abnormalities were observed, including language delay in 94% of the children **and an extremely high frequency of autism (11.4%)**. The high rate of autistic disorders not known to occur in children exposed to alcohol or opiates alone suggests specific cocaine effects.“

Also exposure to metamphetamine during pregancy results in attention disorders in infants: https://www.drugabuse.gov/news-events/nida-notes/2012/12/prenatal-methamphetamine-exposure-linked-problems; also „cognitive problems“ like ASD are to be expected as a result of multiple substance abuse during pregancy. Note that rarely does one addict stay with a single substance! See graphic here: Trends in Substances of Abuse among Pregnant Women and Women of Childbearing Age in Treatment; see also outcome with maternal substance abuse and infant morbidity in the first year: https://www.ncbi.nlm.nih.gov/pubmed/29050752?_ga=2.254166344.1586129326.1516094409-128047203.1516094409;

Since substance abuse is a mental disorder we can expect an overlap between parental psychic disorders and drug abuse, which then also translates into substance exposure during pregnany and increased risk of autistic offspring:

http://pediatrics.aappublications.org/content/121/5/e1357.short;

This has been confirmed in a large study with over 4000 children in Finnland: http://www.sciencedirect.com/science/article/pii/S0165178113000097:
„The present population-based, case-control study examines associations between specific parental psychiatric disorders and autism spectrum disorders (ASD) including childhood autism, Asperger's syndrome and pervasive developmental disorder (PDD-NOS). The cohort includes 4713 children born between 1987 and 2005 with diagnoses of childhood autism, Asperger's syndrome or PDD-NOS. Cases were ascertained from the Finnish Hospital Discharge Register, and each was matched to four controls by gender, date of birth, place of birth, and residence in Finland. Controls were selected from the Finnish Medical Birth Register. Parents were identified through the Finnish Medical Birth Register and Finnish Central Population Register. Parental psychiatric diagnoses from inpatient care were collected from the Finnish Hospital Discharge Register. Conditional logistic regression models were used to assess whether parents' psychiatric disorders predicted ASD after controlling for parents' age, smoking during pregnancy and weight for gestational age. In summary, **parental schizophrenia spectrum disorders and affective disorders were associated with the risk of ASD** regardless of the subgroup. PDD-NOS was associated with all parental psychiatric disorders investigated. Further studies are needed to replicate these findings. These results may facilitate the investigation of shared genetic and familial factors between ASD and other psychiatric disorders.“

Finally there is the scientific hypothesis about drug abuse during pregnany positing that it might cause **sensory deprivation in the embryo, which triggers reactive auditory stimulation, subsequently leading to autism**. This hypothesis is being supported by the ‚endogenous opiate precursor theory‘, explained in Wikipediea tag „Opiod excess theory“: In 1979, Jaak Panksepp proposed a connection between autism and opiates, noting that injections of minute quantities of opiates in young laboratory animals induce symptoms similar to those observed among autistic children. Opiate theory hypothesizes that autism is caused by a digestive disorder present from birth which causes gluten (present in wheat-derived foods) and casein (present in dairy products) to be converted to the opioid peptides gliadorphin (aka gluteomorphin) and casomorphin. According to the theory, exposure to these opiate compounds in young children interferes with normal neurological development by dulling sensory input.

From this follows that pregnant women, addicted to drugs and with their attention reverting inward, are likely to experience an emotional disconnect with their child with serious unintended consequences for the baby which starts hearing in the 24th week inside the womb. The emotional diconnect between mother and baby is likely to harm the baby in particular depriving it of sensery input even before delivery. One born the baby „lacking sufficient sensory input, **the**

developing brain attempts to artificially generate the auditory, vestibular, visual, and tactile input on its own. This attempt at generating input manifests itself as behaviors common to autism, such as grunting or screaming (auditory), spinning or rocking back and forth (vestibular), preoccupation with spinning objects or waving of the fingers in front of the eyes (visual), and hand flapping or self-injury (tactile)“. The theory further states that removing opiate precursors from a child's diet may allow time for these behaviors to cease, and neurological development in very young children to resume normally.“

Wikipedia sums up the spectrum of **multifactorial causation of autism**: „The consensus among mainstream autism researchers is that genetic factors predominate. Environmental factors that have been claimed to contribute to autism or exacerbate its symptoms, or that may be important to consider in future research, include certain foods, infectious disease, heavy metals, solvents, diesel exhaust, PCBs, phthalates and phenols used in plastic products, pesticides, brominated flame retardants, **alcohol, smoking, illicit drugs,** and vaccines. Among these factors, vaccines have attracted much attention, as parents may first become aware of autistic symptoms in their child around the time of a routine vaccination, and parental concern about vaccines has led to a decreasing uptake of childhood immunizations and an increasing likelihood of measles outbreaks. However, there is overwhelming scientific evidence showing no causal association between the measles-mumps-rubella (MMR) vaccine and autism, and there is no scientific evidence that the vaccine preservative thiomersal causes autism.“

Additional material:

(source: http://americanpregnancy.org/pregnancy-health/illegal-drugs-during-pregnancy/)

Marijuana

- What happens when a pregnant woman smokes marijuana? Marijuana crosses the placenta to your baby. Marijuana, like cigarette smoke, contains toxins that keep your baby from getting the proper supply of oxygen that he or she needs to grow.
- How can marijuana affect the baby? Studies of marijuana in pregnancy are inconclusive, because many women who smoke marijuana also use tobacco and alcohol. Smoking marijuana increases the levels of carbon monoxide and carbon dioxide in the blood, which reduces the oxygen supply to the baby. Smoking marijuana during pregnancy can increase the chance of miscarriage, low birth weight, premature births, developmental delays, and behavioral and learning problems.
- What if I smoked marijuana before I knew I was pregnant? According to Dr. Richard S. Abram, author of *Will it Hurt the Baby,* “occasional use of marijuana during the first trimester is unlikely to cause birth defects.” Once you are aware you are pregnant, you should stop smoking. Doing this will decrease the chance of harming your baby.

Cocaine

- Common slang names: bump, toot, C, coke, crack, flake, snow, and candy
- What happens when a pregnant woman consumes cocaine? Cocaine crosses the placenta and enters your baby's circulation. The elimination of cocaine is slower in a fetus than in an adult. This means that cocaine remains in the baby's body much longer than it does in your body.

How can cocaine affect my baby?

According to the Organization of Teratology Information Services (OTIS), during the early months of pregnancy cocaine exposure may increase the risk of miscarriage. Later in pregnancy, cocaine use can cause placental abruption, which can lead to severe bleeding, preterm birth, and fetal death. OTIS also states that the risk of birth defects appears to be greater when the mother has used cocaine frequently during pregnancy.

According to the American Congress of Obstetricians and Gynecology (ACOG), women who use cocaine during their pregnancy have a 25 % increased chance of premature labor. Babies born to mothers who use cocaine throughout their pregnancy may also have a smaller head and be growth restricted.

Babies who are exposed to cocaine later in pregnancy may be born dependent and suffer from withdrawal symptoms such as tremors, sleeplessness, muscle spasms, and feeding difficulties. Some experts believe that learning difficulties may result as the child gets older. Defects of the genitals, kidneys, and brain are also possible.

Heroin

- **What happens when a pregnant woman uses heroin?** Heroin is a very addictive drug that crosses the placenta to the baby. Because this drug is so addictive, the unborn baby can become dependent on the drug.
- **How can heroin affect my baby?** Using heroin during pregnancy increases the chance of premature birth, low birth weight, breathing difficulties, low blood sugar (hypoglycemia), bleeding within the brain (intracranial hemorrhage), and infant death. Babies can also be born addicted to heroin and can suffer from withdrawal symptoms. Withdrawal symptoms include irritability, convulsions, diarrhea, fever, sleep abnormalities, and joint stiffness. Mothers who inject narcotics are more susceptible to HIV, which can be passed to their unborn children.
- **What if I am addicted to heroin and I am pregnant?** Treating an addiction to heroin can be complicated, especially when you are pregnant. Your health care provider may prescribe methadone as a form of treatment. It is best that you communicate with your health care provider, so he or she can provide the best treatment for you and your baby.

PCP & LSD

- **What happens when a pregnant woman takes PCP and LSD?** PCP and LSD are hallucinogens. Both PCP and LSD users can behave violently, which may harm the baby if the mother hurts herself.
- **How can PCP and LSD affect my baby?** PCP use during pregnancy can lead to low birth weight, poor muscle control, brain damage, and withdrawal syndrome if

used frequently. Withdrawal symptoms include lethargy, alternating with tremors. LSD can lead to birth defects if used frequently.

- **What if I experimented with LSD or PCP before I knew I was pregnant?** No conclusive studies have been done on one time use effects of these drugs on the fetus. It is best not to experiment if you are trying to get pregnant or think you might be pregnant.

Methamphetamine

- **What happens when a pregnant woman takes methamphetamine?** Methamphetamine is chemically related to amphetamine, which causes the heart rate of the mother and baby to increase.
- **How can methamphetamine affect my baby:** Taking methamphetamine during pregnancy can result in problems similar to those seen with the use of cocaine in pregnancy. The use of speed can cause the baby to get less oxygen, which can lead to low birth weight. Methamphetamine can also increase the likelihood of premature labor, miscarriage, and placental abruption. Babies can be born addicted to methamphetamine and suffer withdrawal symptoms that include tremors, sleeplessness, muscle spasms, and feeding difficulties. **Some experts believe that learning difficulties may result as the child gets older.**

What does the law say?

Currently, Tennessee is the only state in which a **woman can be prosecuted for using illegal drugs while pregnant.** Women are offered a choice between serving time in jail or joining a rehab program. Many states have expanded their civil child-welfare requirements to include substance abuse during pregnancy as grounds for terminating parental rights in relation to child abuse and neglect.

The laws that address prenatal substance abuse are as follows:

- Iowa, Minnesota, and North Dakota's health care providers are required to test for and report prenatal drug exposure. Kentucky health care providers are only required to test.
- Alaska, Arizona, Illinois, Louisiana, Massachusetts, Michigan, Montana, Oklahoma, Utah, Rhode Island, and Virginia's health care providers are required to report prenatal drug exposure. Reporting and testing can be evidence used in child welfare proceedings.
- **Some states consider prenatal substance abuse as part of their child welfare laws. Therefore, prenatal drug exposure can provide grounds for terminating parental rights because of child abuse or neglect.** These states include: Arkansas, Colorado, Florida, Illinois, Indiana, Iowa, Louisiana, Minnesota, Nevada, Rhode Island, South Carolina, South Dakota, Texas, Virginia, and Wisconsin.
- Some states have policies that enforce admission to an inpatient treatment program for pregnant women who use drugs. These states include: Minnesota, South Dakota, and Wisconsin.

Numbers that can help you locate a treatment center include:

- National Drug Help Hotline 1-800-662-4357
- National Alcohol and Drug Dependence Hopeline 1-800-622-2255