Caffeine Withdrawal Group Paper

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Running Head: CAFFEINE WITHDRAWAL

Research Criteria

Research for caffeine withdrawal is atypical compared to many substances because it has the distinction of not only being the most widely used drug in the world, it is also has little or no societal negativity associated with it. This means that much data may be available, but there is not that much clinical interest. In fact, in studying this subject, few articles were available. In examining research for the syndrome, we needed to answer the basic questions of: what contains caffeine, what symptoms of withdrawal are, and how much dosage is required to generate withdrawal effects.

Coffee isn't the only place we find caffeine. One reason the intake of caffeine is so high is that it is part of many foods and beverages. In addition to this there are many over-the-counter drugs in common usage including diet pills, pain suppressors, and anti-sleep medications. Below is a table listing the caffeine content of various beverages, foods and drugs.

	Caffeine Content (mg)	
Item	**Average**	**Range**
Coffee (5oz)		
Brewed, Drip Method	115	60 to 180
Brewed, percolator	80	40 to 170
Instant	65	30 to 120
Tea (5 oz)		
Brewed, Major US Brands	40	20 to 90
Brewed, Impotred Brands	60	25 to 110
Instant	30	25 to 50
Iced	70	67 to 76
Other Beverages (12 oz)		
Cola, Dr Pepper		3 to 46
Decaffeinated cola, Dr. Pepper		0 to 0.2
Orange, root beer, Lemon-lime		0
Chocolate		
Cocoa beverage (5oz)	4	2 to 20
Chocolate Milk (8oz)	5	2 to 7
Milk Chocolate Candy (1 oz)	6	1 to 15
Chocolate Syrup (1oz)	4	4
Drugs		
Cafergot	100	
Norgesic Forte	60	
Fiorinal	40	
Darvon Compound	32.4	
NoDoz	100	
Vivarin	200	
Anacin, Maximum Strength	32	
Excedrin	65	
Midol	32.4	

(Lecos, 1988)As described in the table above, caffeine can be found in many substances. One major difference may be that the levels in some items may not be high enough to constitute significant caffeine intake unless very large amounts are ingested (e.g. chocolate products).

Caffeine withdrawal can result in serious symptoms. The most common symptoms: headaches, decreased arousal, and fatigue, consistently were reported in 14 different studies (Hughes, et al. 1992). Other various studies reported anxiety, nausea and cravings for caffeine. These symptoms begin 12 hours to a day after cessation of caffeine use, are at their worse at 20 to 48 hours, and last about 1 week. Symptoms would cease after readministeration of caffeine. It is not well know why caffeine causes these symptoms. For example, in the case of headaches, it may be an increase in cerebral blood flow, but the data doesn't support much certanty in this conclusion. The level of seroiusness is what seems to be keeping caffeine withdrawal from being considered in the DSM-IV. However, several studied dteremined that these symptoms were, at times, incapacitating. In one such study, 22 men were given 600 to 700mg/day of caffeine(equivalent to about 6 cups of coffee), for 6 to 7 days, and then placebo was substituted. In 55% of the cases, headaches were "as severe as the subject had ever had". In 27% of the subjects, this was accompanied by nausea, while vomiting occured in 2 (9%) of the subjects. This had been repeated in quite a few more studies. It seems that the number and seriousness of the symptoms merits inclusion in the DSM-IV.

The required dosage to induce symptoms is not much greater than the average that Americans take each day. Most studies have reported these types of symptoms (headache, etc..) at caffeine intakes as low as 200mg (the american average). This is quite disturbing since it is in such common usage. Most studies, however, are actually at a higher dosage, though still not at a level that would seem too high - on the order of 5 to 8 cups of coffee a day.

References

Lecos, C. W. (1988). Caffeine Jitters: Some Safety Questions Remain. Washington D.C.: U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration, Office of Public Affairs, DHHS Publication No. (FDA) 88-2221.

Hughes, J.R., Oliveto, A.H., Helzer, J.E., Higgins, S.T. and Bickel, W.K., (1992). Should Caffeine Abuse, Dependence or Withdrawal Be Added to DSM-IV and ICD-10?, American Journal of Psychiatry. 149:1, 33-38.