

August 6, 2012 Health Care for the Empowered Woman

Smoking in Pregnancy

For the past thirty years the Obstetrics Department of Oswego Hospital has met annually with the team of the Syracuse Regional Perinatal Center to review performance and perinatal morbidity and mortality. Consistently year after year Oswego ranks as best in the Central New York region in every performance parameter. Sadly, we rank the worst in just one: pregnant smokers. After much discussion and analysis and review of national data it has been concluded that smoking in pregnancy largely is a reflection of socioeconomics and education. As our economy has worsened, smoking rates have risen despite the high cost of cigarettes. Patients have circumvented this by purchasing cigarettes at nearby Indian reservations, buying them on the black market and even rolling their own with pipe tobacco. The Hollywood culture and the persistent icons of the Marlboro Man and Joe Camel have not helped either. Young pregnant teens who have parents that smoke have not helped either as these parents frequently say “I smoked when pregnant and nothing happened”. So let me discuss what can and will happen. In the mother the risk of cancer rises tremendously compared to non smokers especially of the lung, tongue, esophagus and pancreas. Effects of nicotine on blood vessels causes more blood clots and fatal heart attacks. Asthma and bronchitis are almost universal and wrinkled skin is a cosmetic side effect. But since this article is about pregnancy, what is the effect on the developing fetus and subsequent child? One of the by products of cigarette smoke is carbon monoxide—yes the same toxic gas produced in automobile exhaust and faulty furnaces. A baby in utero is exposed to this gas directly through the placenta and this can be proven by testing for hemoglobin in the mom that has carbon monoxide in it. So, the effect is similar to locking a child in a car with the engine running and the windows closed! Smoking causes constriction of blood vessels and when this occurs in the placenta the result is a smaller placenta and sometimes premature separation of the placenta occurs as a result that leads to an emergent life saving c-section. It must be remembered that c-section is far riskier for the mother than a vaginal birth with much greater costs and if the child is premature or ill newborn medical costs are astronomical—so much so that it will bankrupt the parents and/or put a tremendous strain on either the insurance company or New York State. Long term, premature babies frequently have developmental delays, increased risk of sudden infant death syndrome and lifelong learning disabilities.

All obstetrical practices have exacting protocols that discuss these effects and providers are trained and, indeed must, meet the standard of care by having frequent discussions that outline antismoking strategies. Parents and associates that provide cigarettes to underage pregnant woman border on the criminal. New York State has an eight hundred number hotline that gives advice on how to stop the habit while treating the addiction to nicotine that is as strong as cocaine addiction. Currently we advise these patients to use nicotine skin patches that can be tapered off gradually. Yes, it is still nicotine but does not have the tar and cancer producing products found in a cigarette. Astonishingly, despite all this information about short and long term side effects and cost we have seen very little in the way of results. Education is the key. Parents, partners and associates must admonish the pregnant patient of the deadly effects of tobacco smoke. But our popular culture must change also so that smoking is no longer considered “cool” but rather as an expensive addiction with grave consequences. If anything pregnancy should be an incentive to quit as no living organism purposefully harms their unborn. As

obstetricians, we will not give up on this and hence the importance of prenatal care. More and more educational modalities are being developed on web sites and smart phones that outline healthy life styles. The American College of Ob-Gyn has voluminous handouts and information packets that would be better read than playing video games and texting. Final message might very well be: "you are going to be a mother, act like one."