

Amber's Secret

by
Lisa Rubin and Clyde Freeman Herreid
University at Buffalo, State University of New York

Part I – Beginnings

It was the summer after high school graduation. Amber Davies, who had graduated third in her class, was home from her visit to New York University, the college she would be attending in the fall. Amber had always dreamt of being a writer in the “Big Apple,” and now she felt she was finally on her way to escaping her small hometown and shaping a successful future for herself.

Amber had celebrated her eighteenth birthday while in New York City. Although the trip had been exciting, she had felt sick the whole time, and the flu-like feeling still hadn't subsided. She was a little concerned, but attributed it mostly to nerves and lack of sleep.

That night as she lay in bed reading, it felt like a gong was going off in her head. Maybe she was on edge over the recent break-up with Brandon, her high school sweetheart. The two had dated since their sophomore year and always joked about getting married. Although Amber's parents never really liked Brandon, Amber had maintained her relationship with him. But everything seemed to go downhill after graduation. Brandon grew distant and stopped calling. He complained that Amber would eventually be far away in New York and would lose touch with him. About a month later, they agreed to put their relationship on hold. Amber thought maybe her pent-up nerves were finally manifesting themselves as a cold. She went to sleep that night trying to ignore the unfamiliar pains and feelings that were consuming her.

I wonder if mom knows she's pregnant.... I've been here nine weeks, she's got to know soon.

It seems like only yesterday I was a tiny blastocyst, traveling down her Fallopian tube and implanting into her uterine wall. I'm about half an inch long now, and I weigh a little over a gram. I'm growing like crazy! My ears, nose, mouth, and limb regions are popping out and the cerebral hemispheres of my brain are well defined. My hindbrain, which will regulate my heart, breathing, and muscle contractions, is really starting to develop. So is my pituitary gland, which will regulate the rest of my glands once they develop. Although my eyes have formed, the eyelids are still fused so I can't blink yet. My heart has been beating for a few weeks and is now separating into four chambers. My diaphragm, stomach, kidneys,

and intestines are developing too. Although my gonads have formed, they still haven't differentiated into either testes or ovaries, but I know genetics has destined me to be a beautiful, healthy girl.

I'm receiving my nourishment through the yolk sac now, but in about two to three weeks, my mom's placenta will take over completely. I feel so sorry for her right now. The high levels of HCG and progesterone circulating through her blood are making her nauseous, but I know she'll look past that once she knows I'm in here. Even though these placental hormones are making her feel bad, I need them so her body will not reject me and instead allow me to continue developing. Mom doesn't know it, but the folic acid in her daily multivitamin is helping my nervous system develop normally and her calcium is helping my bones grow strong.

I hope mom will be happy when she finds out I'm here.

Questions

1. What are the hormonal and physical changes that occurred in Amber's normal menstrual cycle before she became pregnant?
2. Apparently Amber did not use a birth control method. If she had, what options did she have and how do the various methods work?
3. What are the normal stages of development in a fetus during the first weeks after conception?
4. What are the hormonal and physical changes going on in Amber during her pregnancy? What is keeping her from menstruating as normal?

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Part II – Could It Be?

The next morning, Amber’s nausea was unbearable. As she talked on the phone with her friend, Lauren, about her trip, she couldn’t help but complain.

“I can’t believe how sick I feel, Lauren. I’ve never felt this way before.”

“What’s wrong?”

“Well, for the past week or so I’ve been so tired and bloated. My head hurts, my nose is stuffy, I’m nauseous. It seems like I have to go to the bathroom all the time. On top of that, my breasts really hurt and feel swollen. Maybe I’m just getting my period.”

“Isn’t your cycle really irregular? Maybe you’re just stressed out because of your trip.”

“Yeah, but I don’t think I’m that stressed.”

“You know, when my aunt was pregnant, I remember her feeling the same way you just described. She called it morning sickness. Hey, maybe you’re pregnant!”

“Very funny, Lauren. That’s impossible.”

“Well, wait. Didn’t you tell me you slept with Brandon the night before graduation?”

“Yeah, but that was my first and only time. Besides, like I said, my period is so irregular, there’s no way I could have gotten pregnant.”

“Not to scare you or anything, but why don’t you take a home pregnancy test so you can be 100% sure. I promise I’ll go with you to the drug store and won’t tell anyone, okay?”

“What!!! Well, okay, but you have to be there to see the results.”

Now when mom takes that pregnancy test, she’ll finally know why she’s not feeling her best. Even though her menstrual cycle is very irregular, she did become pregnant. Mom didn’t know that she ovulated the day of graduation, and there was a perfect egg waiting to be fertilized. Fertilization is most likely to occur from 72 hours before ovulation to 36 hours after. Since sperm can survive in the female reproductive tract for about 48 hours, fertilization did occur the night of mom’s graduation to form a zygote and then eventually an embryo, me. Luckily for me, mom’s timing was PERFECT.

I’m finally able to move spontaneously, but mom can’t feel this yet. But she knows something’s going on. Her placenta where our blood supplies practically mix together is giving me nutrients and antibodies to fight off disease until I can develop my own immune system. Mom’s natural killer cell activity in her blood is lower now. When I was first conceived, her body released an immunosuppressant protein called Early Pregnancy Factor (EPF) so that I wouldn’t be considered an antigen or foreign body. Thank goodness!

Questions

1. How does a pregnancy test work?
2. How can we account for Amber’s symptoms?

3. Can we consider the embryo a parasite in Amber's body? What prevents Amber's body from rejecting the new tissue developing in her body that is genetically different from her tissues?
4. How much control does the embryo/fetus have over its own development?

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Part III – Time Passes

One Week Later, The Results

“Amber, you’ve been in there a long time. Do you hear me? What’s happening? Do you know the results yet? They’re negative, right? Amber, answer me. You’re scaring me! Amber, what’s wrong? Let me in!”

Mom’s test came out positive, of course! I’m no longer a secret to her. The pregnancy kit tested positive for HCG antibody levels in her urine. I wonder what mom is thinking right now...

“Lauren, I can’t believe it. The test came out POSITIVE! Can that be right? What am I going to do? My parents are going to kill me! I’m not ready to be a mother. Someday, but not now. I’m going to NYU on a full scholarship to study journalism. I even have a spot on the school newspaper. A baby... a baby would change everything! I can’t go through with it.”

“I know, I know. Calm down. The test isn’t conclusive. You need to get it checked by a doctor. Are you going to tell Brandon?”

“No way. We’re not close anymore. He can’t handle the responsibility either.”

“What about your parents?”

“Are you kidding? They never liked Brandon to begin with. My parents are so anti-abortion, Lauren. They’d probably hate me. Help me!”

“Well, how about you and I go to your doctor just to double check that you’re really pregnant. Maybe the doctor can advise you. It’s all confidential so your parents won’t know that you’re going.”

I don’t understand.... Why is mom so upset about this? Doesn’t she realize that today my tail disappeared? That’s a huge step in my development. My ears and upper lip are completely developed. I can hear now! Mom’s heartbeat is so soothing to fall asleep to. I must say my heartbeat is pretty impressive too. It’s beating so fast it almost sounds like the clicking of horse hooves. I’ve doubled in length, which means I’m an inch long, and I weigh four grams. That’s about as heavy as four paper clips! My head is almost half the size of my body, but that will change with time. My gonads are slowly starting to differentiate into ovaries, and the iris in my eyes will soon develop. I hope I have green eyes just like mom!

Another Week Later, A Visit to the Doctor’s

“Well, Amber, your blood work, urinalysis, and internal exam have confirmed that you are pregnant. Your blood pressure is slightly elevated, but because there’s no excessive protein in your urine, I suspect you’re just experiencing gestational hypertension. This often results because the fetus increases maternal blood flow to the placenta in order to increase its nutrient supply. According to your results, you’re over eleven weeks into pregnancy.”

“Eleven weeks! Over eleven weeks! That’s almost the first trimester!”

“Realize, Amber, that you were unaware of what to feel and look for. You also mentioned having menstrual irregularities. That’s common with teenagers. I know it’s soon and you will need some time to think, but

what are your plans for the baby? Since it is toward the end of the first trimester, if an abortion is an option, you need to make that decision before too many more weeks pass.”

“What do you mean? An abortion? What are you talking about? I’m still in shock about being pregnant. My friend, Lauren, is the only person I’ve told. Brandon, my boyfriend, I mean ex-boyfriend, he doesn’t know and I don’t want to tell him. I can’t have a baby! Not now. I have too many plans. I can’t handle the responsibility. It wouldn’t be fair to the baby. I do want children, just not now.”

“Abortion is an option, although not the only one. You could have the child and put it up for adoption. You have a difficult decision ahead of you but not much time. You will want to talk with your parents and perhaps counseling is a good idea. You should know that abortions performed after the first trimester carry more risk to you and are more costly and controversial.”

“Would I have to tell my parents? I mean about an abortion? They are very religious and totally against abortion. I know they wouldn’t accept it. I just know it. It would kill them. I don’t know what to do. This is horrible.”

“It is required by the state that you tell your parents if you’re a minor. You will also have to attend a counseling session before the procedure should you choose to have it.”

“If I’m eleven weeks, then the baby isn’t really formed, right?”

“The embryo is considered a fetus and all major inner organs have begun to develop. There’s a heartbeat.”

“There . . . There is? Can I hear it?”

“Are you sure you want to, Amber?”

“Yes.”

That’s my heart, beating 160 times per minute. I weigh about 7 to 10 grams and I’m about 2.5 inches in length. Today, my fingernails and toenails finished developing. Now, my fingers and toes feel complete. I can’t imagine being without them. Soon my reflexes will be developed. I know those will be important outside of my mom’s tummy.

Speaking of her tummy, it’s probably a little bit bigger at this point. I’m beginning to secrete bile, which will be important for digestion. The amniotic fluid around me is really cozy. My brain is continuing to develop. Even though it’s not the right size at this point, it’s the same shape and structure it will be when I’m born. Lately, mom’s heart is beating faster than it used to. That’s probably because she’s pumping more blood to the placenta for my benefit. Soon, her morning sickness will get better.

But right now I’m worried about mom. And about me.

Questions

1. How is the sex of an embryo determined, and what happens during the developmental process when the sex organs finally become apparent?
2. What is the degree of fetal development that has occurred by the end of the first trimester?

3. What are the regulations regarding abortion in your state and what are the medical, religious, and political reasons behind the legislation?
4. Is it appropriate for the physician to raise the issue of abortion?
5. Should the father have any say in the question of abortion?

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