**Taiba Shah**

**Case: Alexi Burr**

**Immunizations**

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| **Immunization**  | **Reasoning**  |
| Influenza  | 1 does annually  |
| Check Varicella and MMR titers  | Ensure Alexi has retained immunity from her childhood vaccines. |

**Screenings**

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| **Screening**  | **Reasoning**  |
| Cervical Cancer Screening- Pap + HPV contesting every 5 years | Pap smear for women ages 21 to 65 (every 3 years), Pap cotesting with Human Papilloma virus every 5 years starting at age 30- Alexi is 34 y/o  |
| Hypertension  | USPSTF recommends screening for adults ages 18-80 |
| Alcohol misuse  | USPSTF recommends screening for adults ages 18-80 |
| Tobacco use and cessation  | USPSTF recommends screening for adults ages 18-80 |
| Intimate Partner Violence | USPSTF recommends screening for childbearing-aged women |
| HIV infection | USPSTF recommends screening for adults ages 15-65 |
| Depression | USPSTF recommends screening for adults ages 18-80 |
| Hypertension | USPSTF recommends screening for adults ages 18-80 |
| Breast Cancer-offer BRCA gene screening | Alexi has family history of breast cancer from her maternal aunt and maternal grandmother. Hold off on mammogram due to her age  |
| Obesity | USPSTF recommends screening for adults ages 18-80 |
| Colorectal cancer- Multiple modalities and colonoscopy has not shown to decrease mortality compared to other modalities, but it is seen as the “gold standard”  | Patients who have ulcerative proctitis are at increased risk for colorectal cancer and should undergo screening with colonoscopy based on the extent and duration of their disease. Hold off on screening due to her age  |

**Injury Prevention**

Since Alexi has a 4-year-old and a 1-year-old in addition to adult injury preventions she should also be advised for infant and preschool aged children injury prevention.

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| **Injury Prevention**  | **Reasoning**  |
| Traffic Safety | Infant: Discussion of Child safety restraints, car safety seat should always be rear-facing in the back (never in the front seat when there is an airbag), infants should never be left unattended in an automobile Preschool-aged children: Advise on how toddlers should be placed in forward facing car safety seat when they reach the highest weight or highest height allowed by the car seat safety. Her children should ride in the back seat, should never be left unsupervised in or around cars. Driveways and streets are dangerous for children, they should be watched closely when they are nearby. She should begin supervised pedestrian safety; preschool aged children are not ready to cross the street alone. Additionally, bicycle helmets begin with riding a tricycle or a bicycle with training wheels.Adult: remind Alexi about the importance of using a seat belt  |
| Burn Prevention  | Infant: Discuss smoke alarms should be installed and maintained, hot water temperature should be a maximum of 120°F to avoid burns. Alexi should be advised to not hold hot foods and liquids and carry her infant at the same time. She should avoid heating milk and formula in the microwave because it will heat unevenly, and electrical outlets should be covered with non-choking hazard objects.Preschool-aged children: Advise Alexi that smoke alarm batteries should be checked regularly. Children should be kept away from hot oven doors, irons, wall heaters, and grills. Advise patients to keep hot food and coffee out of the reach of young children and electrical outlets should be covered. |
| Fall Prevention  | Infant: Discussion of window/stairway guards and gates are necessary to prevent falls. Infant walkers should not be used, and Infants should not be left alone on furniture (ex. changing tables, beds, sofas)Preschool-aged children: Alexi should be aware that toddlers are learning how to walk and climb, and they need protected from stairways, open windows, and heavy furniture where they can topple over |
| Choking Prevention  | Infant: Discussion of how small objects and balloons can pose a choking hazard, round/cylindrical and compressible objects can pose risk of airway obstruction. Alexi should avoid clothes and toys with long strings/chords to avoid strangulation. Unsafe crib environments, waterbed and plastic bags can pose risk of suffocation  |
| Drowning Prevention  | Infant: Advise Alexi to never leave her infant or preschool aged child in the bathtub or around other bodies of water without constant adult supervision (bath seats/supporting ring are not a substitute for adult supervision), and to empty and store buckets immediately. Preschool-aged Children: Advise Alexi backyard swimming pools or spas need to be completely fenced on 4 sides to separate them from the house and yard; the fence should have a self-closing, self-latching gate. The gate should open away from the pool and should be checked often to ensure that it is in good working order. Children younger than 5 years should swim only with close adult “touch” supervision |
| Poison Prevention | Preschool aged children: Alexi should be advised that medicine and household products should be kept out of the sight and reach of her children and locked up whenever possible. These items should be purchased and kept in original childproof containers or blister packs. Ipecac is no longer recommended and, if present in the home, should be discarded. Keep the poison control telephone number (1-800-222-1222) handy. |
| Safe Sleep Environment  | Infant: Alexi should be advised that her infant should sleep in a supine position in a crib that conforms to safety standards. They should not sleep on soft surfaces like waterbed or sofas and soft material in the sleeping environment should be avoided. Bumper pads should be removed when the infant begins to stand, and the crib sides should not be down when the infant is inside the crib |
| Cardiopulmonary Resuscitation  | Infant: Inform Alexi about training for infant child cardiopulmonary resuscitation and how to access local emergency services  |
| Firearm Safety | Preschool Aged Children: Discuss removing any firearms from the home, where children explore and play and any home that Alex’s child visits. If Alexi or her husband chooses to keep a firearm at home it should be unloaded and ammunition should be kept in separate locked cabinets. |

**Diet**

Alexi has some dietary issues and limitations. She has ulcerative proctitis which poses a limitation to her diet. She also states she eats healthy stuff “when she remembers to eat” which indicates an issue where she is not eating often. This is a concern because Alexi has a history of anorexia nervosa as a teenager. Additionally, Alexi is juggling 2 children and a full-time job, so she has trouble in bringing lunch or snacks from home to work. Her dinners are not always home cooked and are sometimes from a food chain restaurant or a prepared foods counter at the supermarket. The issue with prepared foods and meals from food chains is she is not in control of what’s in her food. These meals are often higher in fat, calories cholesterol and sodium compared to homemade meals (2).

My first recommendation is for Alexi to ensure she eats 3 meals a day. With her history of anorexia nervosa and her statement of “when she remembers to eat” raises slight concern, however, currently her BMI is 19.5 which is in the normal range. Nevertheless, I would emphasize that she increases her frequency of eating because she could be malnourished due to a combination of ulcerative proctitis and lack of eating. Ways in which she can increase her frequency of eating with her busy schedule is she can grab quick snacks for work, like her apples and almond butter, crackers, bread, and bananas (which replenish potassium and magnesium lost in diarrhea). For people for ulcerative proctitis a low fiber diet is recommended. I would recommend for her to follow a low fiber diet every so often. For breakfast Alexi can continue to eat almond butter with toast. I would recommend she incorporate scrambled eggs for protein and vegetable juice. The vegetable juice contains most of the vitamins and minerals found in whole fruits but with less fiber. She can take the vegetable juice to go when she is at work and drink it throughout her day. Since she has a hard time bringing lunch to work, I would advise that she meal prep on her days off, pack leftovers from her husband’s homecooked meals, or while she is preparing her children’s food. She can have probiotic yogurt (if she can tolerate milk and milk products) as a snack because it is generally allowed in a low fiber diet and has shown to ease inflammation. She states she eats fruits and vegetables with little red meat and no fried foods I would encourage her to continue these eating habits. Additionally, when she eats fruits and vegetables, she should eat deeply colored fruits and vegetables because they are high in nutrients. Skins are particularly high in fiber, she should occasionally have fruits without skins There are some trigger foods that can worsen flare and ulceration that she should avoid, such as caffeine, alcohol, spicy foods, uncooked vegetables. Therefore, I would recommend her to try reducing caffeine with half caffeine coffee (and eventually decaf) because caffeine triggers diarrhea, and since she drinks on Fridays and on the weekends, I would recommend she reduce her alcohol consumption to maybe 1 or 2 glasses of wine once a week because it can casue diarrhea as well. Since salads (uncooked vegetables) are a trigger foods for ulcerative proctitis, I would recommend she eat cooked vegetables from the university cafeteria or to have half a lettuce salad with some tofu or chicken for protein. For dinner I would recommend protein rich foods like broiled or steamed fish, tofu, chicken and eggs. Food that are high in omega 3 fatty acids like salmon, walnuts and soybeans have shown to help reduce inflammation. She should eat home cooked meals more often then prepared foods. I would recommend healthy meals and recipes that she can prepared quickly like cooked vegetables with tofu.

**Exercise**

Alexi’s exercise issues are that she has trouble finding time to exercise with two children and a full-time job. Her job doesn’t involve much activity, she sits for long hours and stands for long hours. Her walks from one end to the campus to the other end campus are not sufficient enough to fulfil recommended daily exercise. The CDC recommends aerobic activity, 75 min/week of vigorous intensity exercise or 150 min/week of moderate intensity exercise, and muscle strengthening exercises 2x a week. Alexi should start with 150 min/week of moderate intensity exercise and then increase to vigorous intensity 75 min/week. She can incorporate several 10 minutes of activity in a day to reach daily goals. Alexi used to have a formal exercise program, so I would ask her about it and see if it can be adjusted to fit her current lifestyle. She should prevent effects of prolonged sitting by taking breaks and stand up regularly, and walking after lunch. There are ways where she can be active with her children as well. She can take her children out to the park, play ball with her toddler, put them in stroller and go for a brisk walk on her days off. Alexi can utilize resistance band exercises and body weight exercises like squats and push-ups for muscle strengthening for a few minutes a week like before she sleeps. There are small steps she can take to reach her daily exercise goal. If she is required travel to different floors at work, she should take the stairs instead of the elevator or escalator. If she takes public transportation, she could get off the train 1 stop earlier and walk. If she drives a car she can park farther away from her university and have a longer walk to campus. On days that her husband is at home and she can take 1 hour and go for brisk walk or a jog. I would emphasize this because she feels like she doesn’t have time for herself, so being able to exercise alone may help her feel like she is taking care of herself. This feeling may increase her motivation for exercise and she will be more willing to take time out of the day for exercise. I would explain to Alexi how to calculate maximum heart rate and explain to her that currently during moderate aerobic exercise her heart rate maximum (which is not the goal) is 93 bpm, and for vigorous intensity the maximum is 130 bpm. She should also be informed that some gyms have a day care, so she can work out, while someone is supervising her children.

**Harm Reduction**

Alexi has a past medical history of anorexia nervosa. She had treatment for it in the past, but since she has low frequency of eating due to her busy schedule, there is slight concern. This is can be an example of risky behavior. She is at a normal BMI which should be maintained. To reduce the potential harm, she should stick to the diet plan as discussed above. If she continues to eat a less than 3 times a day then an alternative diet plan needs to be made, where she can get a sufficient amount of nutrients from the meals that she does have. The goal for harm reduction for Alexi is to ensure she stays at a normal BMI, prevent malnutrition and relapse of anorexia nervosa.

**Brief Intervention**

I would conduct a brief intervention for alcohol consumption. Currently Alexi’s alcohol consumption does not indicate abuse. However, since Alexi drinks on Fridays and on the weekends, sometimes up to 4 glasses of wine I would provide some intervention. She uses alcohol as a way to relieve stress which can progress her consumption. I would use ADUIT tool and CAGE screening tool to assess if she is at increased risk for excessive drinking. Starting with the questions in CAGE: “have you ever felt you needed to **C**ut down on your drinking? Have people **A**nnoyed you by criticizing your drinking? Have you ever felt **G**uilty about drinking? Have you ever felt you needed a drink first thing in the morning (**E**ye-opener) to steady your nerves or to get rid of a hangover?” For AUDIT I would ask the first 3 questions “how often do you have a drink containing alcohol?” “how many drinks containing alcohol do you have on a typical day when you are drinking?” and “how often do you have six or more drinks on one occasion?”. If after adding up her score from responses to the 3 questions is a 3 or higher, then I would continue with questions 4-10 on the AUDIT tool. I would assess her readiness to change, examine her history with alcohol, discuss treatment options, and provide patient education about how it affects her ulcerative proctitis.

**What should be addressed first?**

We should address Alexi’s diet and exercise first. She complains that she has not been able to focus on herself because of her busy schedule. When she prepares food for herself and consciously considers foods that limit the effects of ulcerative proctitis, then she will feel like she is focusing on herself and she will be healthy enough to take care of her family. Additionally, exercise will help ease some of her stress and she might in turn reduce her drinking and caffeine consumption. Furthermore, it is important to ensure that Alexi is getting her nutrients due to her low frequency of eating, history of anorexia nervosa and present medical illness of ulcerative proctitis.

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