



Working together with individuals, families and medical professionals to offer support and information on Syncope and Reflex Anoxic Seizures

Key Stage Three/Four Citizenship Lesson on RAS and Syncope

Curriculum Areas: PSHE/ Citizenship (could also be adapted for use in drama/literacy/ assembly).

Focus: To have an understanding of RAS and syncope.

Vocab: special, different, faint, dizzy, syncope, black out, seizure, pale, pallor, scared, excluded, lonely, dilemma, syncope. RAS (reflex anoxic seizure).

Possible Starting Points:

1. CASE STUDY OF A CHILD WITH SYNCOPE AGED 10

'My name is Hannah. I have a type of syncope called reflex anoxic seizures, which means your arms and legs jerk when you blackout. These usually start when I suddenly bang myself hard, especially if I am tired and hungry. There are a few moments before I actually blackout (sometimes I realise it is about to happen and sometimes I don't- if I have some warning time I manage to lie down first so I don't hurt myself falling over). First, everything goes black and I am told I suddenly stop what I am doing and crash to the ground. I have been told it isn't a crumple type of fall when I faint; my body goes stiff.

All I can hear is a buzz like a bee is stuck in my ear. I would say I feel 'dreamy' when I am unconscious and I've no idea how long I am unconscious for. Everyone says that my face goes really white.

When I start to come round, voices sound like an echo, far away, but they get closer and then really loud.

Once I am awake I feel vulnerable, scared and weak. Most of all I want to keep lying down and cuddle something. The only way people can help me is to let me lie down for a few minutes and not try to move me because sometimes I feel dizzy and scared to get up.

I need to have some space and have the chance to recover, but it is nice to have a friend to stay with me. My friend Sophie is really calm and ok about my syncope. She's cool about it and knows how to help me.

Most of the time I don't let having syncope worry me. It only does if I have recently had a reflex anoxic seizure. When I am at school I am always wary of getting banged. All the same, I love Judo, netball, swimming and hockey, although with hockey I do get scared that the ball might hit me and I might blackout.

It is fine for everyone to forget about my syncope and just treat me like everyone else, as long as they know how to help me if I blackout. I am the same as everyone else, and I want to have a go at anything!!'

2. 1. CASE STUDY OF A CHILD WITH RAS AGED 14



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After I have had an attack I feel dizzy and drowsy. I feel weary and dead like I can't move with out hurting my legs. I often get horrendous pains in my legs especially at night. I have been to the doctors but they don't do anything. I sometimes take paracetamol to ease the pain, it doesn't always work though. Mum sometimes rubs them. I lay down and rest on my bed or on the sofa. When I have had an attack everyone seems to shout, everyone is so noisy. Mum says she is not shouting but her voice is so loud. I also want to cry and cry and cry and cry and I don't know why. My mum gives me great big hugs and tries to make me laugh and feel better but I don't really feel better. I feel shaky and just want my mum, I feel frightened. After yesterday attack I was so tired but I couldn't sleep because I was afraid. I like it best when my mum is with me because I know she will save me if she can. I wish the doctors could make this go away or give me some medicine to help me feel better. I hate it. I don't play hockey at school because I am afraid I will get hit but it wasn't a hockey ball that got me but a tennis ball. I hate it when everyone looks at me.

Aim:

1. To understanding and sensitively interpret factual information.
2. To participate in group discussions using factual information to support their ideas and suggestions.

Activity:

1. Using one of the above prompts introduce information related to RAS or syncope.
2. Read out the fact sheet on blackouts.
3. Make a list of important words - checking the class understand their meaning.
4. Discuss and list the dilemmas possibly facing a child with syncope.

Group Activity:

Either:

1. In teams, use the syncope quiz to reinforce facts and understanding.
- Or
2. In groups discuss how the school could enable a child with syncope to feel included.
 - a. What information might have to be shared - and with whom, in order to allow the pupil to have full involvement in school life.
 - b. What information might have to be shared - and with whom, in order to allow the pupil to have full involvement in school life.
 - c. What could class mates do to support a child with syncope?

Individual/ Paired Activity:

1. Is Hannah Welcomed Here?

Write a story from both Hannah's point of view and that of her new school



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mates; include in it the dilemmas and misunderstandings that Hannah and her new friends may initially have, and how they manage to overcome these.

Teacher Resources:

FACTSHEET 1: BLACKOUTS

We are learning about blackouts and a medical condition called syncope so that we can understand what happens to some people.

What is a blackout?

'Blackout' is another word for 'faint'. When this happens to someone, they usually fall over, everything around them goes dark and they do not know what is going on around them. In other words, they become unconscious*.

Why does this happen?

There are 2 main reasons why some people blackout:

In some people, their heart slows down or stops and there isn't enough pressure to pump blood around the body. When this happens, the amount of blood, which carries oxygen to the brain, slows down. This is what causes the blackout.

For some people, the electric circuits in their brain do not work very well which can make them blackout.

Do blackouts happen to lots of people?

Yes, blackouts happen to lots of people, of all ages, all over the world- some people may only blackout once in their whole life, but others blackout many times every day!

FACTSHEET 2: SYNCOPE [you say it like sink-oh-pee]

What is syncope?

'Syncope' is a difficult word that Doctors use to explain the type of blackouts that are caused by a problem with the heart or the blood pressure. This can stop the blood that is carrying oxygen from getting to the brain.

Why and how does syncope happen?

In our body we have a very important nerve called the vagus nerve, which controls how our body works in lots of different ways. It helps to move food around the



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body, controls the muscles we need to speak, helps to make us sweat and keeps our heart beating!

If someone has syncope, many different things- which we call 'triggers'- such as very hot or cold temperatures, a sudden shock or surprise, a bump, being very thirsty, or standing up for a long time, can upset this nerve. This is because it has been hurt or surprised by the trigger.

It 'curls up' and stops the heart from beating or makes it beat very slowly for a few seconds and the pressure that pumps the blood around very low. There is a sudden drop in the amount of blood getting to the brain with the oxygen, and the person blacks out- they fall over and become unconscious. Sometimes the person will know that they are about to blackout and might lie down to try to stop it.

TRIGGER → VAGUS NERVE 'CURLS UP' → STOPS HEART BEATING/DROP IN AMOUNT OF PRESSURE PUMPING THE BLOOD → BLOOD NOT BEING PUMPED TO BRAIN → SYNCOPE OCCURS

For some people, if their heart stops very suddenly, their arms and legs jerk and their face goes very white. These jerks are just the way that their body kicks back to work after they have been unconscious. (It is a bit like a car trying to start on a frosty morning!)

The brain always kicks in and makes sure that the heart starts beating again and that everything goes back to normal, so the person will always be OK. They might not remember what has happened though and might be very sleepy and in a bad mood for a few days!

FACTSHEET 3- What to do if someone has a blackout

- 1- Don't be frightened. It is very scary to watch someone fall over and become unconscious and even more scary to see someone jerk and go very white. Remember that they will be OK.
- 2- Tell a friend to run for a teacher



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- 3- Put them in the recovery position (teacher to demonstrate in class)
- 4- Make sure there are no dangerous objects lying near to them that could hurt them
- 5- Stay quiet and calm and let the teacher take over

SYNCOPE QUIZ

1. The word 'blackout' means the same as 'fainting'
TRUE/FALSE
2. If someone has a blackout they stay awake and conscious
TRUE/FALSE
3. There are 2 main reasons why some people blackout: 1-because they are too tired, 2-because they have a problem with their legs which makes them fall over and become unconscious
TRUE/FALSE
4. Many people have blackouts
TRUE/FALSE
5. Syncope [sink-oh-pee] is the name for a blackout that is caused by a problem with the brain
TRUE/FALSE
6. Lots of different things can make the vagus nerve curl up. These are called 'triggers'
TRUE/FALSE
7. When this nerve gets a shock from the trigger and curls up, it lets the blood get to the brain more quickly
TRUE/FALSE
8. Sometimes a person's arms and legs will twitch and jerk when they have a blackout. This is called an anoxic [a-nock-sick] seizure.
TRUE/FALSE
9. Even though their heart can stop beating, the person will always be ok again
TRUE/FALSE



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10. If someone has a blackout you should just leave them alone and leave the room.

TRUE/FALSE

ANSWERS TO SYNCOPE QUIZ:

Talk these through with the pupils so that they can mark their quiz accordingly.

1. TRUE- 'blackout' does mean the same thing as 'fainting'
2. FALSE- if someone has a blackout they become unconscious and usually collapse
3. FALSE- The 2 main reasons why some people have blackouts are:1- the blood, carrying oxygen, is not getting to the brain because of a heart or blood pressure problem, 2- a problem with the electrics in the brain
4. TRUE- blackouts happen to lots of people of all ages, all over the world
5. FALSE- syncope is the name for a blackout that is caused by a problem with the heart or the blood pressure. Something triggers the vagus nerve to curl up and this stops the heart or blood pressure from pumping the blood to the brain.
6. TRUE- lots of different things can trigger the nerve to curl up, which stops the blood from being pumped to the brain, causing syncope. Very high or low temperature, being thirsty, being made to jump, or feeling pain can all make someone blackout
7. FALSE- the vagus nerve stops the blood from being pumped to the brain because the heart stops beating for a little while. The vagus nerve can also make the amount of pressure there is to pump the blood drop. In both cases, the blood cannot get to the brain and so the person blacks out.
8. TRUE- for some people who have syncope, their heart completely stops beating for a while and sometimes their arms and legs twitch and jerk. This is called an anoxic [a-nock-sick] seizure
9. TRUE- the brain will always kick in to make the heart start beating again



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10. FALSE- don't leave someone alone if they have had a blackout. Follow the care procedure: don't be scared, someone should run to fetch a teacher, make sure dangerous objects are taken away, put person in the recovery position if you know to and keep quiet and calm until the teacher arrives