1 June 2020- Issue 20

THE WALLINGTON WEEK

Message from the Head Teacher

Dear Parents and Carers

I trust everyone is staying safe and keeping well.

This week's newsletter includes some of the work that Wallington students have been getting up to during lockdown as well as containing important information from our uniform outfitters, Cladish.

Following on from the newsletter last week, you should have now received two letters regarding the reopening of the school in light of recent government announcements. The first was from our CEO, Jennifer Smith, outlining our plans for next half-term. These include looking to hold face to face meetings with Year 10 and 12 students and further enhancing our remote learning provision as well as outlining the principles behind these plans. We will continue to keep parents informed and will write again once we have more details, in line with government guidance. As I am sure you are aware, this also depends on what the government announces on Thursday 28 May as to whether they have met their five tests for lifting lockdown.

The other letter was informing parents and carers that, as of Monday 1 June, WHSG will be restarting our key worker hub for our vulnerable students and for children of key workers. Those wishing to make use of this provision will need to notify the school by 2pm on Tuesday 26 May – further details are in the original letter. We look forward to welcoming this group of students back to school on Monday 1 June.

Finally, the government has recently published guidance and support for parents and carers of children who are learning at home during the coronavirus outbreak. Guidance on helping secondary school children continue their education during the coronavirus outbreak can be found here:

https://www.gov.uk/guidance/help-secondary-school-children-continue-their-education-during-coronavirus-covid-19
I hope that you find this guidance useful.

Have a good half-term and thankyou for your continued support in this unprecedented time.

Richard Booth
Headteacher

Telephone Numbers / Email Addresses

I have sent out a number of emails to you via Schoolcomms regarding emails and telephone numbers. If you have received one of these, kindly email me, Mrs Davies, Communications Officer, on

sdavies@wallingtongirls.org.uk

with updated information. In these times particularly, in is vital that our emails reach you and you are kept fully informed.

Thank you

Cladish—School Outfitters

If your daughter needs any items of school uniform from Cladish, our school outfitters, please see the following information we have received from them about ordering or visiting items.

As a school uniform business that values each and every one of the 20 schools that we supply uniform for we are committed to try and make the purchasing of uniform as safe as we possibly can and have your students attend school in the official school uniform.

We wish to follow government guidelines and therefore are rearranging our premises and trading patterns in the following way…….

- A one way system of our 2 shops creating a safe in and out.
- The creation of 6 separate serving bays to allow for social distancing.
- The option for parents and student at the entrance to use hand gel and a mask/gloves.
- The restriction of allowing only 1 parent 1 student to enter the premises. (If there is an obvious reason for more than 1 parent or student then this will be catered for.)
- As numbers will be restricted entering our premises at any one time there will have to be a queuing system at peak times outside our shop.
- To provide a click & collect service where the customer buys online & collects their items at the rear entrance of our premises which is in Woodcote Mews, Wallington. (A map with directions will be included within the online sale.
- We will provide a free delivery service by car once a week to new primary school parents when they purchase items online. This will apply to all orders over the value of £10.
- It will be essential to encourage existing parents to use the click & collect service to reduce numbers that will attend our premises especially the nearer we get to back to school in September.
- We are considering late night opening options to extend the periods that new parents can visit the shop.
- There will be **no** opportunity to use any of our fitting rooms.
  Any items that have been tried on within the serving bays and not needed will be steamed cleaned.
- The school appointment system we operate for our senior schools will still be operational and the times allowed will have to be adhered to in fairness of all other parents. We will also increase the appointments.

Where we would like your help is in advising your parents of the proposed changes by email.

We have produced a flyer that you can attach which will explain the changes to our shopping pattern

There is still so much uncertainty regarding this epidemic and how the government wishes to proceed and our understanding at this time is that Primary schools may reopen in some way early in June 2020 if the infection rate continues to subside. Additionally non essential shops such as ours will also be allowed to open in early June.

As we are categorised as a non essential business we have to adhere to the governments guidelines which may mean making changes to our proposals in the future however as we understand it at present the above will be acceptable although causing disruption to schools and parents alike.

As previously mentioned we are committed to try and serve the school and your parents in a safe and sensible way and will do everything we can to make this happen and provide the uniform of the school.
We will also keep you informed of any changes that may have to happen if matters change.

I would be so grateful if you could help us regarding the matter of advising parents/carers by confirming this by email (cladishwallington@yahoo.co.uk)

Many thanks to you all.

Trevor Langridge.
M.Director Cladish & Co Ltd

WALLINGTON HIGH SCHOOL for GIRLS

PROCEDURE TO PURCHASE THE SCHOOL'S UNIFORM

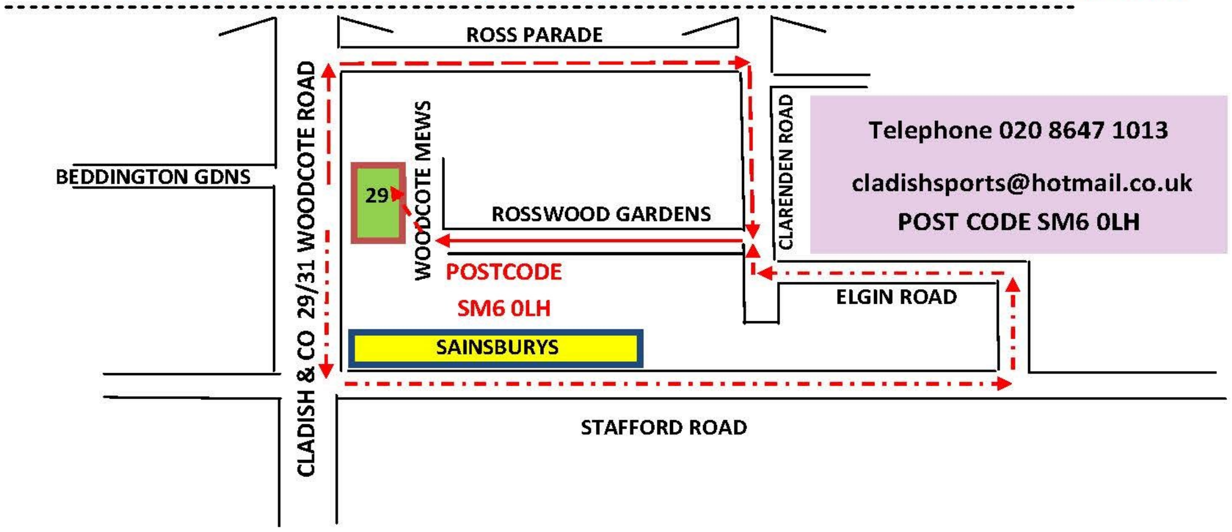
During the Coved epidemic

EXISTING PARENT'S WITH CHILDREN ALREADY AT THE SCHOOL

- You are advised to use the Cladish click & collect service that will be available from early June. Collections to be made from the rear of our premises at No.29 Woodcote Mews, Wallington SM6 OLH.

  (see map attached).

THE REAR OF CLADISH IS NO.29 WOODCOTE MEWS WITH PARKING ALLOWED FOR CLICK & COLLECT (next to cream fascia at No.31)



Telephone 020 8647 1013

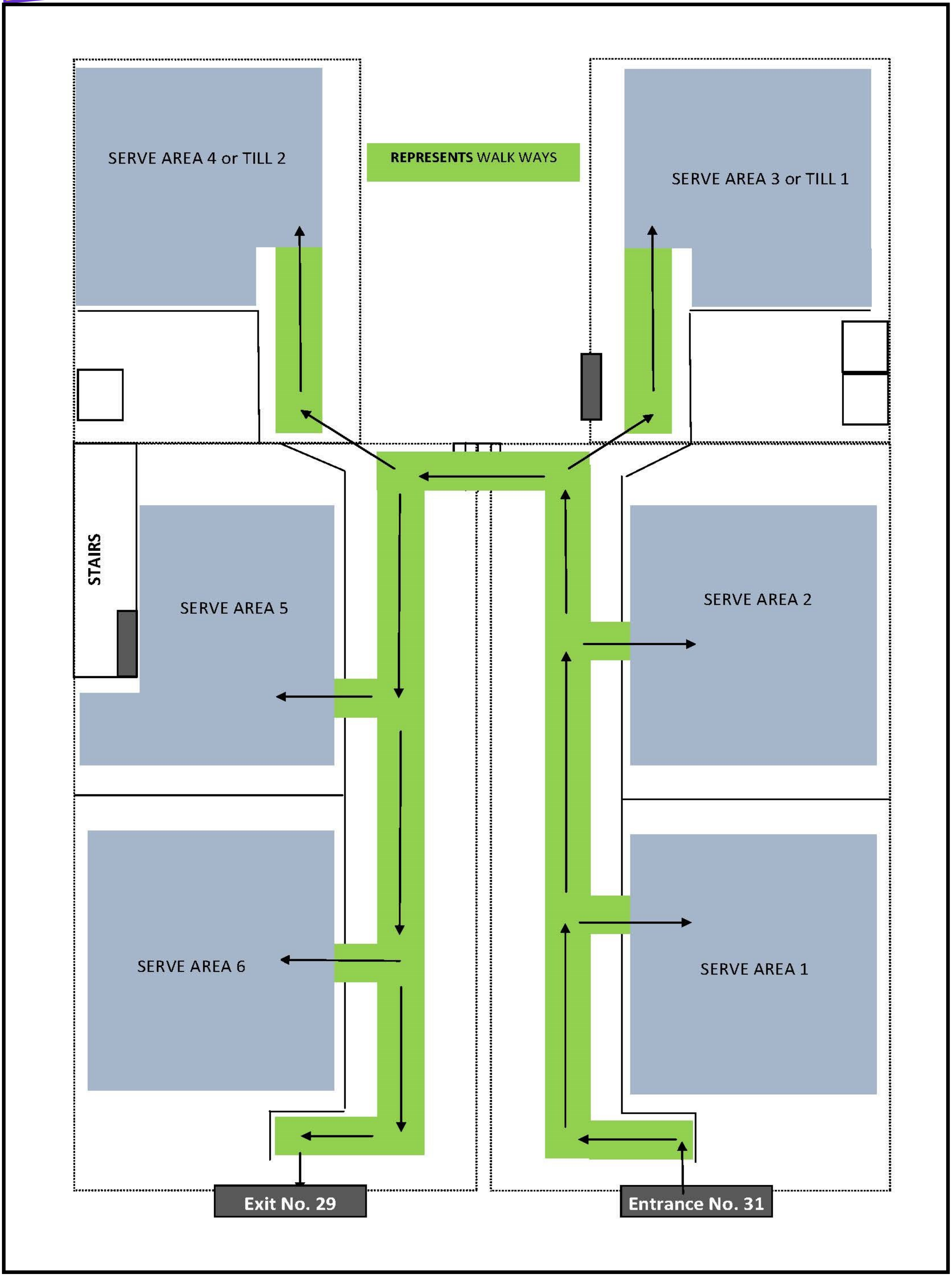
cladishsports@hotmail.co.uk

POST CODE SM6 0LH

NEW PARENT'S WITH CHILDREN STARTING SCHOOL SEPTEMBER

- You are advised to reserve an appointment by emailing Ben@cladishsports.co.uk which will help in reducing queues outside the shop in Woodcote Road, Wallington.
- A particular time and date will be agreed for you to attend.

  (please note there will be no use of our fitting rooms during this time.)
- If you choose to come to the shop without an appointment please be advised there may a waiting time. Queuing will be outside the shop.


SERVE AREA 4 or TILL 2
REPRESENTS WALK WAYS
SERVE AREA 3 or TILL 1
STAIRS
SERVE AREA 5
SERVE AREA 2
SERVE AREA 6
SERVE AREA 1
Exit No. 29
Entrance No. 31

Constructing a Plant Cell Model in Science

Please see attached a plant cell model made at home by Shazia in Year 7. Great example.

"I made this using:

Chloroplast- Green Skittles

Structure of plant cell - green jelly using gelatin and green colouring

Nucleus- Ferrero Rocher

Vacuole- I scooped out some jelly in the middle & filled it with a blue coloured liquid to represent the cell sap in the vacuole

Cell wall- Outer rim of container

Cell membrane - Inner rim of container

I used a Ferrero Rocher to represent the nucleus as it is larger in size than the green skittle chloroplasts.

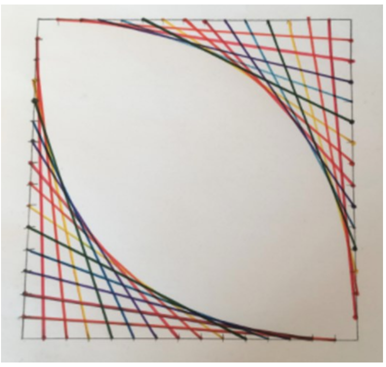
Lastly, i labelled all my parts of my plant cell. Hopefully this can be entered into the bulletin to inspire other students to add some fun to science and get creative."

Mathematics Puzzles

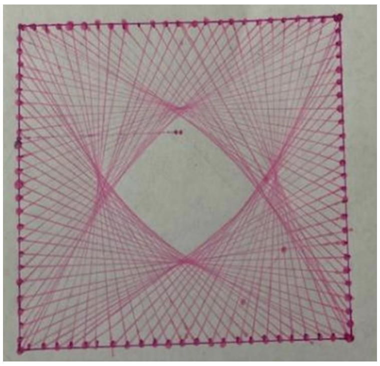
Many students across all year groups have been sending excellent answers to mathematics puzzles that are set every Wednesday. Last week the puzzles included some instructions on how to do “Curve Stitching” and some students decided to give it a go with some impressive results...

Year 7

Lucie

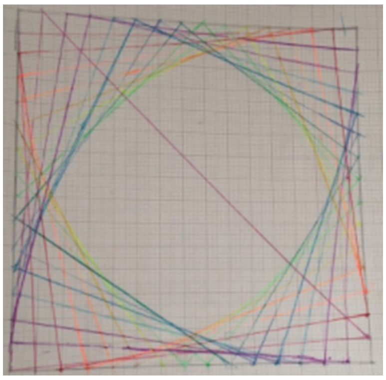


Shazia

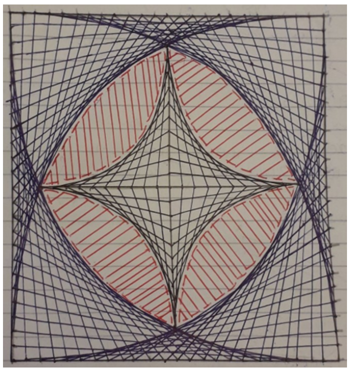


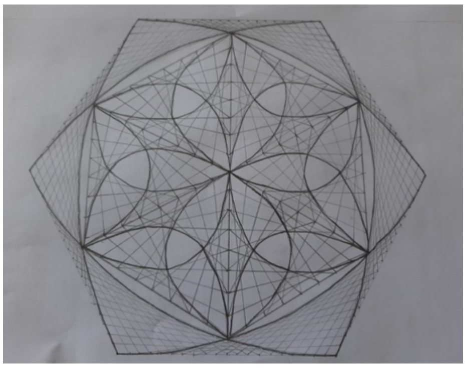
Year 9

Mayukha



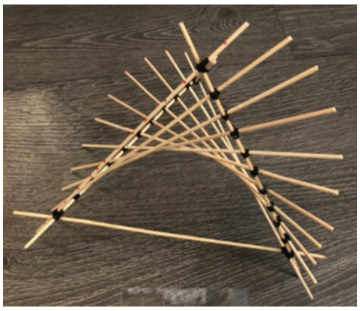
Dhriti





Year 10

Ashvini made a wonderful sculpture



If students are interested in giving it a try they can find some instructions here

https://mathcraft.wonderhowto.com/how-to/create-parabolic-curves-using-straight-lines-0131301/

https://nrich.maths.org/5366

Of course, if you look at google images of curve stitching you will get some great ideas

Please send any more photos of your work to Miss Tucker

SICKLE CELL ANEMIA

By Ashvitha—11 Seacole

Introduction

Sickle Cell Anemia the most common form of the sickle cell disease, an inherited sickle-cell disease, where the red blood cells, normally possessing a biconcave shape, instead have a abnormal crescent or "sickled" shape.

Anemia is where the body does not have a sufficient amount of red blood cells and these now "sickled" cells die much faster than regular red blood cells. Due to the shape of these diseased cells, as they have now reduced surface area, it becomes much harder to carry oxygen all around the body and becomes much more challenging to travel through blood vessels in the body.

This disease affects the red blood cells and a protein called haemoglobin (which is located in red blood cells) production (abnormality).

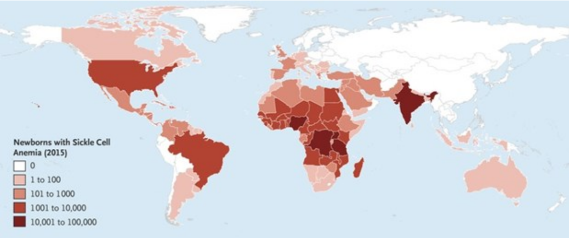
Demographic

Sickle Cell Disease is more prevalent in specific ethnic groups: those of African descent including affecting 8% of African-Americans (1 in 12 carry a sickle cell gene); Hispanic-Americans from Central and South America; Middle Eastern; Indian and Mediterranean descent and Asians.

History

Dr James Herrick in 1904 took in an African-American patient and studied their blood sample under microscope to find the red blood cells bent and twisted reminding him of the shape of a sickle, hence the name given. He claimed this sickled shape of red blood cells caused the weakness, sores on legs and dizziness the patient he had diagnosed, was due to this disease.

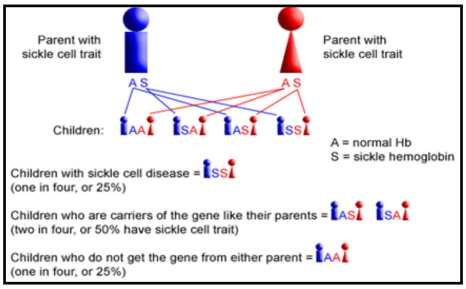
A potential reason as to why those of African descent are more likely to have this disease is due to those geographic regions being most prone to malaria and the fact that the gene variant for sickle cell disease is connected to malaria.



Cause

Sickle Cell Anemia is a lifelong blood disorder inherited from immediate parents Sickle Cell Anemia is present at birth, but many infants do not show any signs until after 4 months of age.

It is a point mutation, which means a nucleotide is affected in the gene sequence, the gene for Haemoglobin. This sickle cell gene is an autosomal recessive gene trait meaning a person must inherit this gene from both parents in order to show symptoms of this disease but if only one copy is inherited, this person is a carrier i.e. would have the sickle cell trait and not show any symptoms.



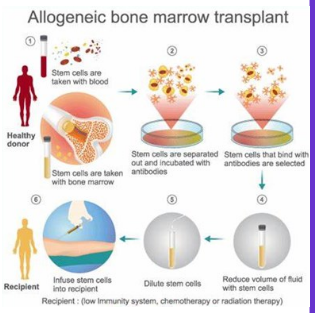
Problems

Due to the lack of oxygen carried around the body because of Sickle Cell Anemia, pains can occur all over the body (notably joint and bone pains) and problems with the bone marrow. Other symptoms include jaundice like symptoms such as yellowing of skin; sores due to poor circulation; symptoms of fever; vision issues; fatigue and weakness; shortness of breath making exercise a great challenge. Sickle cell disease can result in many complications such as stroke or high blood pressure; skin ulcers and gallstones as well as a life-threatening condition called acute-chest syndrome.

Treatment

Despite there being no actual cure for this disease, there are several different treatments patients can undergo.

One surgical procedure those with Sickle Cell Amenia can go through is a bone marrow transplant. The transplant involves replacing bone marrow affected by sickle cell anemia with healthy bone marrow/stem cells from a (usually matched) donor who doesn't have sickle cell anemia, and will then inject them into your body usually via an IV tube into a vein. That means your body will stop making the sickle-shaped cells that cause the disease as the cells will start to create healthy blood cells.



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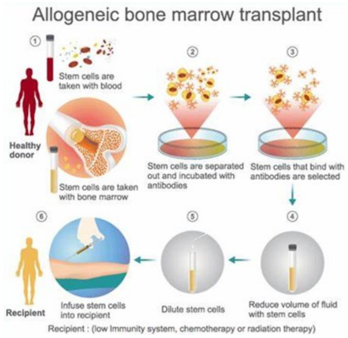
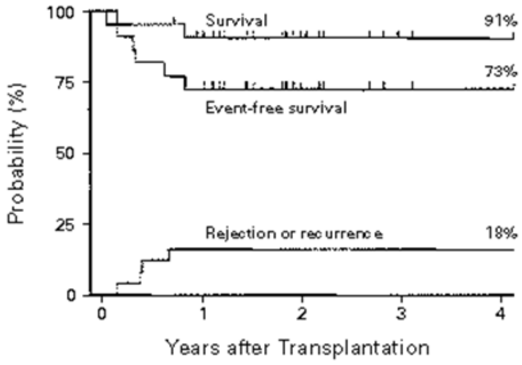
Sickle Cell Anaemia





Possible issues and risks with this transplant are rejection from the body's immune system as the transplanted cells recognise the recipient's cells as "foreign" and attack them. This is known as graft versus host disease (GvHD).This can occur within a few months of the transplant or develop several months or occasionally a year or 2 later. The condition is usually mild, but can sometimes be life-threatening. Fortunately, GvHD can be treated with medications that suppress your immune system and stop the transplanted stem cells attacking the rest of your body.

In terms of cost efficiency, the sickle cell information centre website estimates the cost of the transplant process for most patients to be $150,000 to $250,000 which includes pre-transplant evaluation, transplant stay, and post-transplant follow-up which equates in price to 10 sickle cell hospital admissions in the US.

Alternative Treatment:

Hydroxyurea will not cure this disease but can be used to reduce pain episodes and the need for blood transfusions by improving the ability of red blood cells to carry oxygen and decreases breakage of the cells in people with sickle cell anemia.

In terms of looking at symptoms on the more severe side i.e. acute chest syndrome, a serious lung condition, may require emergency treatment with antibiotics, blood transfusions, oxygen and fluids given into a vein also hydroxycarbamide may be needed to prevent further episodes.

www.hematology.org/Patients/Anemia/Sickle-Cell.aspx
https://www.alex-scarf.org/sickle-cell-anemia
https://www.nejm.org/doi/full/10.1056/NEJMra1510865?af=R&rss=currentIssue
https://luke.com.ng/diseases/sickle-cell-anemia-introduction-understand-disease-sickle-cell-anemia-complications-sickle-cell-disease-sickle-cell-disease-occurrence-survival-rate-signs-symptoms-sickle-cell/
https://www.mayoclinic.org/diseases-conditions/sickle-cell-anemia/diagnosis-treatment/drc-20355882
https://www.nhs.uk/conditions/stem-cell-transplant/risks/

Vitiligo—Not Skin Deep—by Angelique— 11 Seacole

Vitiligo - Not

by Angelique

Abstract

Vitiligo is a genetic disease that can affect anybody. In fact, over 70 million people in the world have vitiligo. This scientific poster aims to explain why vitiligo is such an issue for those who have it; what the exact cause of vitiligo is; the treatments available for vitiligo and the implications and future research of these treatments.

References:

Anon, (n.d.). Global Vitiligo Foundation – Helping find a cure for vitiligo. [online] Available at: https://www.globalvitiligofoundation.org [Accessed 22 Apr. 2020].

British Skin Foundation. (2018). Vitiligo. [online] Available at: https://www.britishskinfoundation.org.uk/vitiligo.

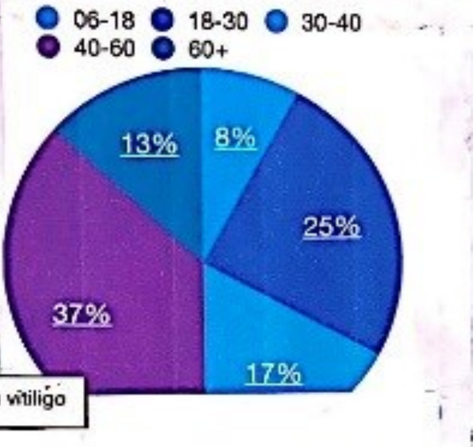
Harvard Health Publishing (2018). Vitiligo - Harvard Health. [online] Harvard Health. Available at: https://www.health.harvard.edu/a_to_z/vitiligo-a-to-z.

Mayo Clinic. (2018). Vitiligo - Symptoms and causes. [online] Available at: https://www.mayoclinic.org/diseases-conditions/vitiligo/symptoms-causes/syc-20355912.

Mayoclinic.org. (2018). Vitiligo - Diagnosis and treatment - Mayo Clinic. [online] Available at: https://www.mayoclinic.org/diseases-conditions/vitiligo/diagnosis-treatment/drc-20355918.

NHS Choices (2020). Overview- Vitiligo. [online] Available at: https://www.nhs.uk/conditions/vitiligo/.

www.aad.org. (n.d.). Vitiligo: Overview. [online] Available at: https://www.aad.org/public/diseases/a-z/vitiligo-overview [Accessed 22 Apr. 2020].



Age variation in vitiligo

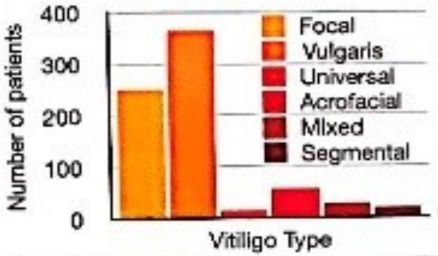
Symptoms & problems that this disease causes

Vitiligo is a long-term skin condition that causes depigmentation in areas of your skin, hair and even the inside of your mouths. Typically, as time goes in, these areas of discolour will continue to spread if not treated. It can affect any race, gender and age.
Although vitiligo is not life-threatening, it can be damaging to your self-image and how you feel about yourself.
Additionally, those with vitiligo have a higher risk of psychological distress, sunburn and eye problems.
Vitiligo accompanies mild symptoms such as itching and burning as well as extremely dry skin.

Types of Vitiligo

There are five main types of vitiligo (the graph on the right shows the frequency of each type). Each type is slightly varied and describes where the the depigmentation occurs. The types are as follows:

- **Vulgaris vitiligo**-symmetrical patches growing on many parts of the body (also the most common)
- **Universal vitiligo**-patches on all skin surfaces
- **Segmental vitiligo**-patches mainly on one side of the body typically occurring at a younger age
- **Focal vitiligo**-patches on one/a few areas of the body
- **Acrofacial vitiligo**-patches on face and hand



Causes of vitiligo

Vitiligo occurs when pigment-producing cells (melanocytes) die or stop producing melanin (the pigment of skin, hair and eye colour).

No one completely knows why these cells die/stop producing melanin but we are fairly confident that it is because of these reasons:

- **an autoimmune condition**

This is when your own immune system attacks the melanocytes so they stop producing melanin. The diagram below shows the effect of a lack of melanin and how it effects the appearance of skin.

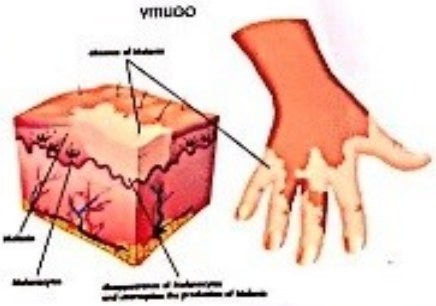
- **family history**

Family history can also predispose individuals to an increased likelihood of developing vitiligo. In fact, 25-50% of people with vitiligo have a relative with vitiligo. Additionally, 6% of people with vitiligo have a sibling with vitiligo.

- **a trigger event**

Events such as extreme sunburn or skin trauma (eg. contact with a chemical) can leave a person with an increases likelihood of developing vitiligo.

There are other causes of vitiligo, such as worm invasions and iron & copper deficiency, but the three above are the main and most common causes of vitiligo.



Brief introduction into the various different treatments of vitiligo

The type of treatment offered to a patient is dependent in on their age, the speed at which the vitiligo is spreading, the location of the vitiligo, how much skin is covered and the effect of vitiligo on their everyday life. The various treatments of vitiligo available include medications, light-based therapy and surgery. These help restore pigmentation to the skin as well as evening out skin tone. However, the results from these treatments vary with each person and are very unpredictable. Additionally, many of these treatments come with unwanted side effects such as redness and burning.

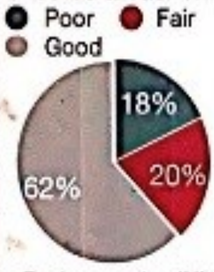
Because of this, many doctors recommend easier methods of disguising vitiligo-such as self tan and makeup. This is because although there are many different treatment options, these treatments can take months to judge the effectiveness on an individual, and an individual might have to try a variety of combinations and approaches before finding an effecting one. Additionally, these treatments cannot event more patches of vitiligo spreading, which is bound to happen.

Different types of treatment

There are three main types of treatment as mentioned above-in this section we will go into more detail about these three:

Medications consist of two types of medication. Firstly is drugs that control inflammation. This is normally given as an ointment but can take the shape of a pill or an injection. This is corticosteroid medication and it is used in the early stages of vitiligo to soothe as it prevent cells from releasing inflammatory chemicals in response to lack of melanin. Although this can restore skin tone, this can also cause skin thinning and streaks or lines on the skin. The second type of medication is given as a pill or ointment and it affects the immune system. Calcineurin is an enzyme that plays a key role in the immune system. By taking calcineurin-inhibitors, you repress this enzyme and your immune system which can help control the immune system attacking the melanocytes. However, side affects to this medication include concerns that these pills and ointments cause lymphoma and skin cancer.

Light therapies- There are many types of light therapies but the most common is phototherapy with narrow band ultraviolet B light. This is very effective in slowing down the effect of vitiligo when use simultaneously with the medication mentioned above. However, this has to be down 2-3 times a week for up to 6 months.
If all other light therapies and medications do not work, depigmentation of unaffected skin is available. A depigmenting agent is applied to unaffected skin and light is used to permanently lighten skin to blend with the effected areas. This is done once or twice a day for 9+ months.



Surgery- If other treatments fail to work, there are many surgeries available such as blister grafting and cellular suspension transplant and most commonly, skin grafting. This is when healthy skin is transferred onto affected areas.

Is it working? Future possibilities

The pie chart on the left shows the results of regimentation after using medications. Future treatments include an implant to promote the stimulation of melanocytes.

Implications behind light therapies

Social implications of light therapies-Light therapy has to be conducted very frequently (at the most, 2 times a day for up to 9 months) to be truly effective. This can be socially straining for patients as well as for those around them. This can take time out of their lives and distrust them on an everyday basis.

Environmental implications of light therapies-Light therapies utilise narrow band ultraviolet B light which can be potentially dangerous for the environment.

Ethical and economical implications-Vitiligo can never be fully treated and can never fully stop spreading, especially without continuous treatment. Is there any point in using resources to stop this inevitable spread when resources can be used for other skin diseases that are more curable?

The map of the world to the left shows how many treatment centres there are around the world-should we be using these centres for other research?

Charity Virtual Bake Off

The senior prefects are running a Charity Virtual Bake Off. The money that we raise will be donated to Purley Food Hub. Please see the following message from the Purley Food Hub.

"A huge thank-you to you and the senior prefects and everyone else at Wallington High School for Girls for supporting Purley Food Hub through your Virtual Bake Off on 29th May - we are most grateful and wish you all a very successful event. We look forward to hearing how it goes!

Since the outbreak of the coronavirus pandemic, we have never been so busy. We are delivering food parcels direct to the homes of clients and their families referred to us by Croydon Council, job centres, schools, children's centres, GPs, etc. We provide each person with food for three meals a day for three days, and in each of March and April we provided over 5,000 meals - our most ever. In total, since the Food Hub was set up by the churches of Purley and Kenley in 2013, we have provided nearly 185,000 meals to people in crisis in the Borough of Croydon.

And it is all down to the kindness and generosity of our many supporters, such as schools like Wallington High, and local churches, businesses, uniformed organisations, Rotary and Women's Institutes, and many, many families and individuals. Plus, of course, the hard work of our wonderful team of 150 volunteers!

We produce a list each month of the food and toiletries that we need most (latest list attached), and use money donations to buy items that we are short of. We also post regular news updates on our website at www.purleyfoodhub.net.

For more information about the Food Hub, and to receive the monthly food list by email, please contact Jean Ludlow, our Administrator, on purleyfoodhub@gmail.com.

Thank you all again - we greatly appreciate Wallington High's wonderful support at this time."

Calling all Star Bakers:

WHSG SENIOR PREFECT TEAM PRESENTS:

VIRTUAL BAKE-OFF

All proceeds will be donated to Purley Food Hub.

PLEASE UPLOAD YOUR ENTRIES ON FROG (WHSG VIRTUAL SCHOOL FOLDER) AND DONATE BY

FRIDAY 29TH MAY

https://www.justgiving.com/crowdfunding/wallington-bake-off

£2.00 minimum entry fee.

Please help your community in this time of need with your Showstopper bakes!