



Control of Sickle cell & Thalassemia Disease in Odisha

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TLSHSRC, NHM &

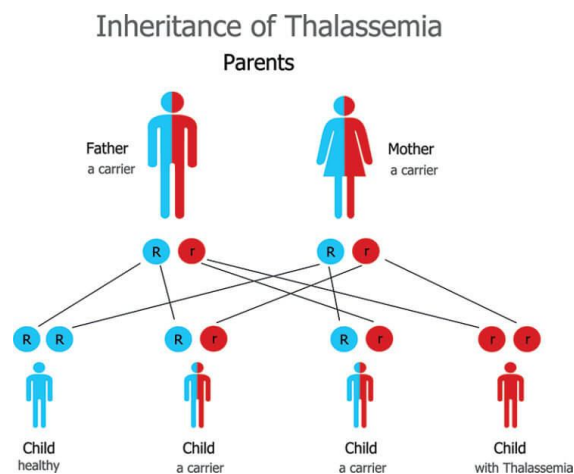
Nodal Officer Sickle cell and Thalassemia Project, Odisha



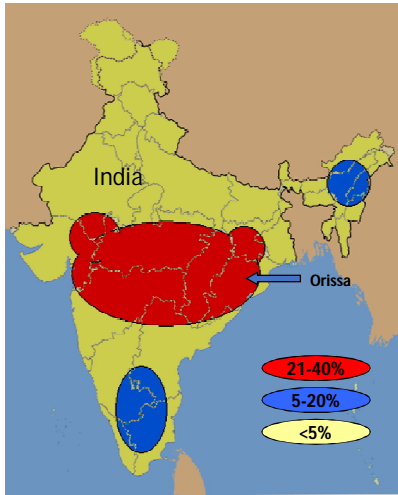
Definition of Sickle Cell Disease and Thalassemia

- Sickle Cell Disease is a genetic disorder in which red blood cells are converted to a sickle shape. The cells die early, leaving a shortage of healthy red blood cells and can block blood flow causing pain. It passes from parents to offspring.
- Thalassemia is an inherited blood disorder characterized by less oxygen carrying protein (Hemoglobin) and fewer red blood cells in the body than normal. It also passes from parents to offspring.

It is more prevalent because of endogamy and consanguineous marriage which is more happening in the tribal districts and western Odisha mostly seen in the Aghoria & Kultha families.

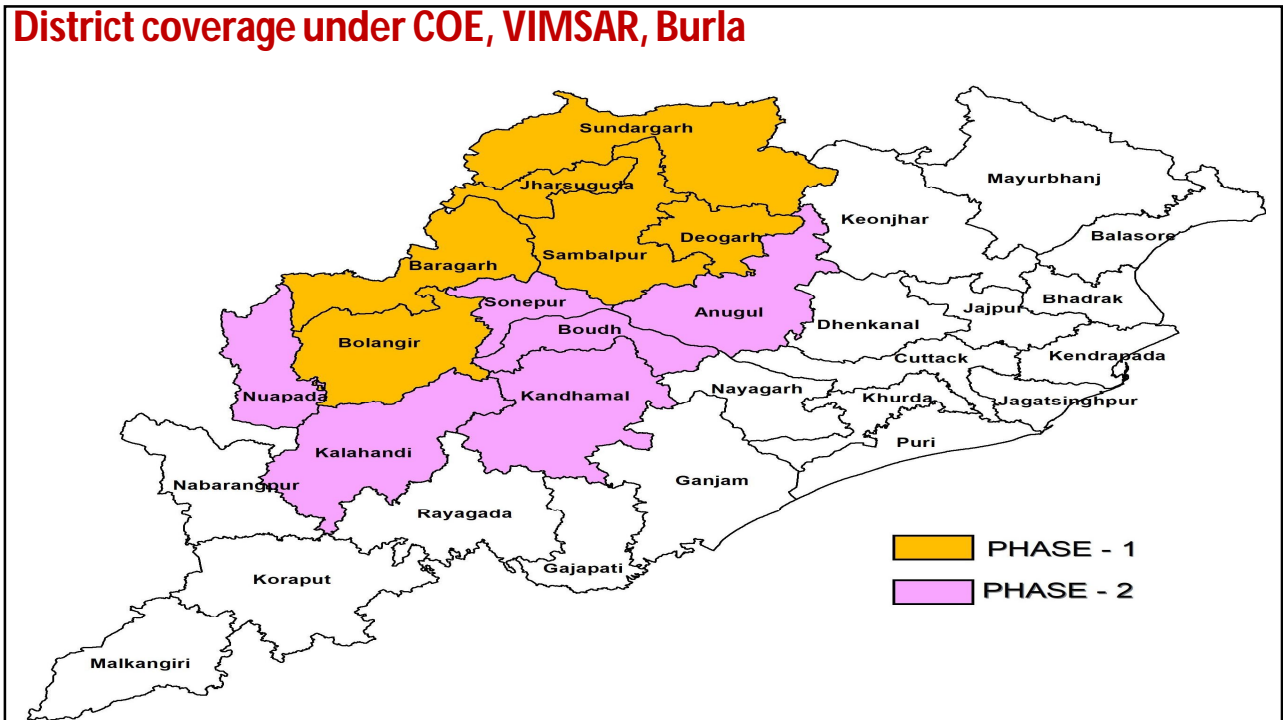


Prevalence of Sickle Cell gene in India

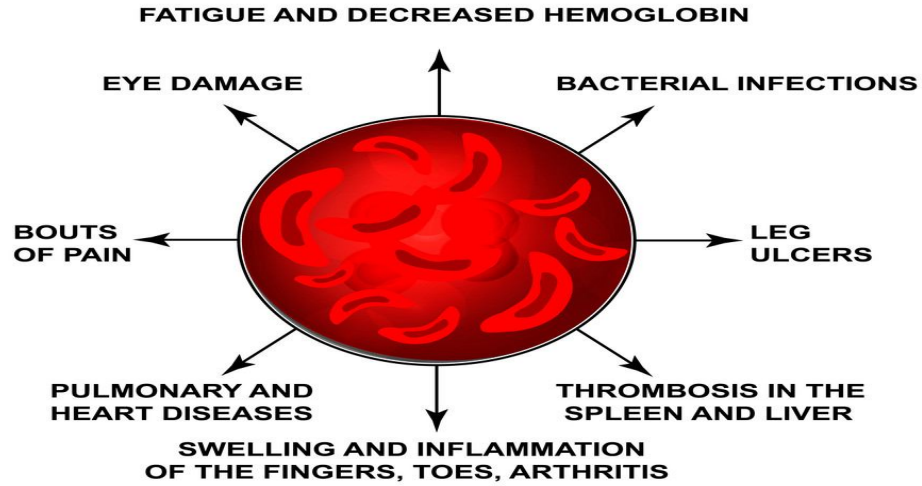


- States with high prevalence are Odisha, Jharkhand, Madhya Pradesh, Chhattisgarh, Maharashtra & Gujarat.
- The frequency varies between 5% to 40% in these high-risk states.
- The State of Orissa falls in the High prevalence zone (21-40%).
- Few caste groups in Odisha especially from western districts of the state have very high frequency of sickle cell disease due to preferential endogamy.

District coverage under COE, VIMSAR, Burla



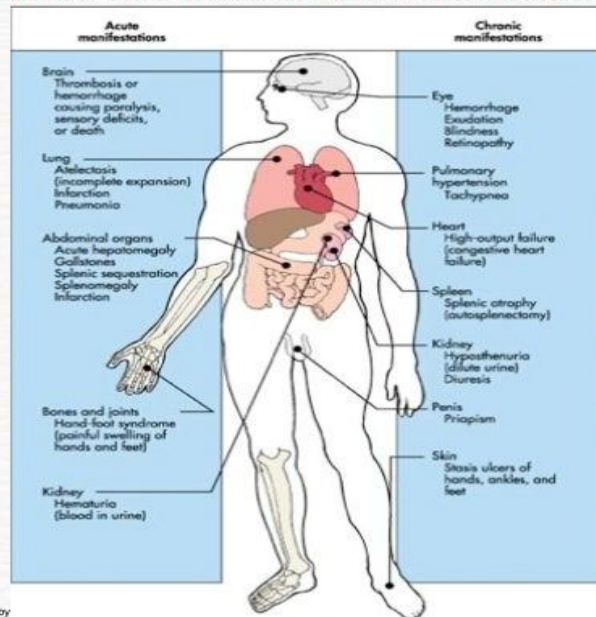
SYMPTOMS OF SICKLE CELL ANEMIA



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Clinical Manifestations of Sickle Cell Disease



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Complications of Sickle Cell Disease

Chronic Complications

The diagram shows a human figure with red arrows pointing to various parts of the body, each labeled with a complication. The labels are: Retinopathy (eye), Obstructive sleep apnea (throat), Pulmonary hypertension (lungs), Cardiomegaly (heart), Functional asplenia (spleen), Avascular necrosis (joints), Skin ulcers (leg), Delayed puberty (genitals), Chronic renal failure (kidneys), Isosthenuria (kidneys), Indirect hyperbilirubinemia (liver), and Anemia, leukocytosis (blood).

Retinopathy
Obstructive sleep apnea
Pulmonary hypertension
Cardiomegaly
Functional asplenia
Avascular necrosis
Skin ulcers
Anemia, leukocytosis
Indirect hyperbilirubinemia
Isosthenuria
Chronic renal failure
Delayed puberty



“ସିକିଲ ସେଲ ଏବଂ ଆଇରୋସିନିଆ ପ୍ରତି ଓଡ଼ିଶା”
 ଓଡ଼ିଶା ସରକାର ଓ ବି.ଏମ୍.ସି ଡେଭୋଇ ଡ୍ଵାରା ଏକ ମିଳିତ ପ୍ରୟାସ

ସିକିଲ ସେଲ ରୋଗ ସମ୍ବନ୍ଧୀୟ ଜରୁରି ସୂଚନା

ସିକିଲସେଲ ରୋଗ କ’ଣ ?
 ଏହା ଏକ ଦୀର୍ଘକାଳୀନ ରକ୍ତ ବ୍ୟାଧୀୟ ସମସ୍ୟା ଅଟେ, ଯାହା ଦୀର୍ଘ-ମାତ୍ରାରେ ପିଲାମାନଙ୍କୁ ଆସିବାର ସମ୍ଭାବନା ଥାଏ । ଏହି ରୋଗରେ ଆକ୍ରାନ୍ତ ପିଲାମାନେ ଜଟିଳ ସାମ୍ବ୍ୟବସ୍ଥା ସମସ୍ୟାରେ ସମ୍ମୁଖୀନ ହୋଇଥାନ୍ତି ।

ଏହି ରୋଗର ସାଧାରଣ ଲକ୍ଷଣ:

- ଆସ୍ତ୍ର-ଗଣ୍ଠି ବ୍ୟଥା
- ଦୀର୍ଘକାଳୀନ ସ୍ଵାସକ୍ଷମତା ଏବଂ ଘାଟି (ଅଭାବ)
- ଉନ୍ମାଦ ଉତ୍ତେଜନ

ପିଲାମାନଙ୍କ ଠାରେ ଏହି ରୋଗର ଲକ୍ଷଣ ସାଧାରଣତଃ ୩ ମାସରୁ ୨ ବର୍ଷ ମଧ୍ୟରେ ଦେଖାଯାଇଥାଏ ।

ରୋଗର ଉପଚାର:

- ଦୀର୍ଘକାଳୀନ ଉଚ୍ଚ-ଡୋଜ୍
- ଔଷଧ ଡେଇଟ
- ଅସ୍ଥିନିକ୍ଷା ପ୍ରତ୍ୟାହତ

ରୋଗର ଉପଚାର ଅତ୍ୟନ୍ତ ଦୀର୍ଘକାଳୀନ ଏବଂ ଆର୍ଥିକାତ୍ମକ ଚାଲିଥାଏ । ପ୍ରତିଦିନ ୧୦-୧୫ ଘଣ୍ଟା ଉପାସ ଥାଏ ।

ପ୍ରତିକାର:
 ଯଥା ଶୀଘ୍ର ରକ୍ତ ପରୀକ୍ଷା କରାଇ ଜିନିଷ ଚିକିତ୍ସା କରାଯାଏ । ଯଦି ଆକ୍ରାନ୍ତ ହୋଇଥିବାର ଜଣାପଡ଼ିଛି ତାହାହେଲେ ପରୀକ୍ଷା କରାଯାଇ ଏହାର ଆବଶ୍ୟକ ଚିକିତ୍ସା ଓ ପରିଚାଳନା କରାଯାଏ ।

ଦେଖିବାକୁ ରକ୍ତ ପରୀକ୍ଷା କରାଇବା ଆବଶ୍ୟକ:

- ୧୩-୧୫ ବର୍ଷ ପର୍ଯ୍ୟନ୍ତ ସମସ୍ତ ବ୍ୟକ୍ତି
- ଉନ୍ମାଦ ଉତ୍ତେଜନ ମଣ୍ଡିତ
- ଉନ୍ମାଦ ଉତ୍ତେଜନ ସୀମା (ଆବଶ୍ୟକ ହୁଏ)
- ଉନ୍ମାଦ ଶିଶୁ (ଆବଶ୍ୟକ ହୁଏ)

ଅଧିକ ସୂଚନା ପାଇଁ ଜିଲ୍ଲା ସ୍ତରୀୟ ସାମ୍ବ୍ୟବସ୍ଥା ଅଧିକାରୀଙ୍କୁ ଏ.ଏଚ୍.ଏମ୍.ଏସ୍ ଆଖା ବିଜିଏ ଏବଂ ଯୋଗାଯୋଗ କରନ୍ତୁ ।

ଆପଣ ଏଥିରେ ଆକ୍ରାନ୍ତ ଜଣାପଡ଼ିଲେ ତୁରନ୍ତ ତାହାଙ୍କୁ ପରୀକ୍ଷା କରାଇ ଜିନିଷ ଚିକିତ୍ସା କରାଯାଇ ପ୍ରକୃତ ଜୀବନ ଉଦ୍ଧାର କରନ୍ତୁ । ଏହି ରୋଗର ସମସ୍ତ ପରୀକ୍ଷା, ଆବଶ୍ୟକୀୟ ଔଷଧ ଓ ଜିନିଷ ଚିକିତ୍ସା ସରକାରୀ ସାମ୍ବ୍ୟବସ୍ଥାରେ ଚିକିତ୍ସା ପ୍ରଦାନ କରାଯାଏ ।

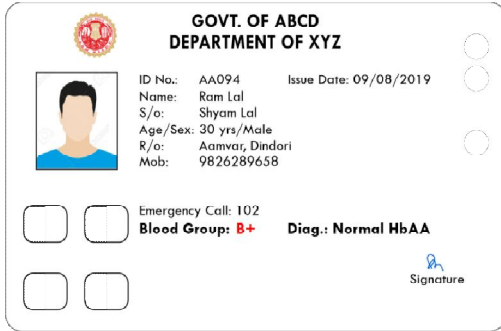
ରକ୍ତ ପରୀକ୍ଷା, ଭବିଷ୍ୟତକୁ ସୁରକ୍ଷା

ସୁସ୍ଥ ଓଡ଼ିଶା, ସୁଖୀ ଓଡ଼ିଶା



Figure 2 : Pictures showing symptoms of patients with **Beta-Thalassemia.**

Sickle Cell ID Card



**GOVT. OF ABCD
DEPARTMENT OF XYZ**

ID No.: AA094 Issue Date: 09/08/2019

Name: Ram Lal

S/o: Shyam Lal


Age/Sex: 30 yrs/Male

R/o: Aamwar, Dindari


Mob: 9826289658

Emergency Call: 102


Blood Group: B+ **Diag.: Normal HbAA**


Signature


Chances of disease in your children?	Can Marry?
<input type="radio"/> All Normal children	Okay
<input type="radio"/> 50% Normal, 50% Carriers children	Okay
<input checked="" type="radio"/> 50% Normal, 50% Carriers children	Okay
<input type="radio"/> All carriers children	Okay
<input checked="" type="radio"/> All carriers children	Okay
<input checked="" type="radio"/> 25% Diseased, 50% Carriers, 25% Normal	Rethink
<input checked="" type="radio"/> 50% Diseased, 50% Carriers children	Not advisable
<input checked="" type="radio"/> 50% Diseased, 50% Carriers children	Not advisable
<input checked="" type="radio"/> All Diseased children	Not advisable




Normal
 Carriers
 Diseased




25%



25%



25%



25%

Odisha sickle cell project, V.S.S. Medical college, Burla was inaugurated by Honourable chief minister of Odisha Sri Naveen Pattanayak & Honourable minister of health & family welfare Sri Prasanna Acharya on 19.06.2010 Which happens to be the World Sickle Cell Day.



Signing of MoU

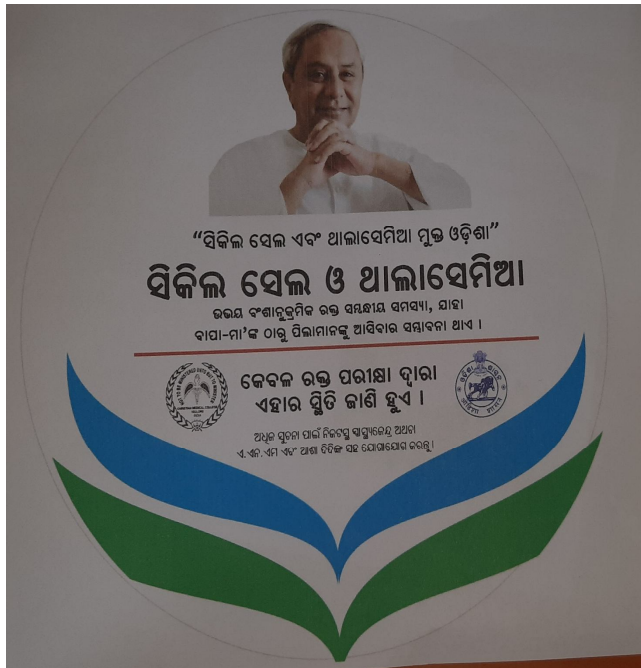


- MoU has been signed between the Govt. Of Odisha and CMC Vellore on 5.12.2017.

Newer Approach : a programme beyond screening

Complete life cycle approach for prevention

- 1- ANC
- 2- Spouse of HPLC +ve ANC
- 3- CVS for foetus in utero of couple both found HPLC +ve
- 4- School students std 8th and above screening



**Appeal by Honourable CM,
Odisha for awareness generation**



Thank You