### Sickle cell disease: regular follow-up – adult patients

*On behalf of the RBC committee – BHS:*

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<table>
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<th>Minimum once</th>
<th>Annual evaluation</th>
<th>Three months follow up visit</th>
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<td>Including nurse call if no show</td>
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| Extended red blood cells phenotype and if possible red blood cells genotyping | Regular clinical evaluation  
Education and training  
Social and psychological support | Vital parameters T°, Blood Pressure Pulse, O₂ saturation  
Standard medical history with enquiry about last painful crisis  
Standard clinical examination |
| **Biology** |                      |                              |
| CBC, reticulocyte count, CRP, BUN, creatinine, LDH, AST, ALT, Bilirubin, Alc Phosphatase, Glycaemia, vit B12, Folic acid  
Urine analysis (24H): protein, creatinine clearance  
Ferritin  
PTH, vit D, Calcium/creat., NTx/creat  
Viral serologies: HBS, HBC, HIV (1x/year or more frequently if transfusions) | Biology | Minimum CBC (fingertip ok),  
% HbS level (if treatment via RBC transfusions, simple or exchange)  
% HbF (if treatment with hydroxyurea)  
Ferritin (if regular RBC transfusions)  
Renal function (if treatment with iron chelator-Exjade) |
| ECG |                      |                              |
| Echocardiogram with evaluation of tricuspidal regurgitation (Vmax) |                      |                              |
| Chest X-ray |                      |                              |
| Pulmonary function (transcutaneous O₂ saturation) and 6 minutes walking test |                      |                              |
| Abdomen ultrasonography |                      |                              |
| Brain: Angio-MRI |                      |                              |
| Ophthalmology: retinal exam |                      |                              |
Other procedures/advises based on individual clinical course
- Gynaecology (fertile women)
- Bone densitometry
- Otorhinolaryngology (ENT)
- Stomatology
- Dermatology

**Vaccination**
- Influenza vaccine: annually

**Check immunization status**
- Haemophilus influenzae type B
- Meningococcal
- Pneumococcal (every 5 years)

Hb=Haemoglobin
CRP=C Reactive Protein
AST = Aspartate aminotransferase,
ALT =Alanine Aminotransferase
LDH= Lactate dehydrogenase
PTH=Parathyroid hormone
NTX= N terminal Telopeptide

CBC= complete blood count
BUN= Blood urea nitrogen
MRI= Magnetic resonance imaging

**References**
British Guidelines on sickle cell anaemia, 2008

ENERCA guidelines, 2012 www.enerca.org