

Guterwa Ibigize Amaraso ni Iki?

Gutanga ibigize amaraso, bita kandi gutanga amaraso, bishobora gutuma umurwayi arushaho kumererwa neza. Bishobora no kurokora ubuzima bw'umurwayi. Kimwe n'indi miti myinshi, guterwa amaraso bijyanirana n'ibyago runaka. Umubare w'abarwayi barushaho kuremba cyane cyangwa bagapfa bitewe no guterwa amaraso ni muto cyane ugereranyije n'ibyiza bakura mu bice by'ingenzi bigize amaraso.

Biganireho n'umuganga wawe kugira ngo umenye impamvu nyayo cyangwa icyo ukeneye ku birebana n'igice cy'amaraso wowe cyangwa umwana wawe mugiyeye guhabwa.

Ibice by'ingenzi bigize amaraso bikunze gukoreshwa mu gusimbura ibice by'amaraso biba bibura cyangwa bikaba biri ku gipimo cyo hasi bitewe n'igikomere cyangwa uburwayi. Muri ibyo harimo insoro zitukura z'amaraso, udufashi tw'amaraso, umushongi w'amaraso, cryoprecipitate na granulocytes.

Ese ibigize amaraso bituruka he?

Ibice bigize amaraso bitangwa n'abantu batanga amaraso ku bushake. Amaraso yabo akusanywa mu buryo bugenzurwa, hanyuma agatandukanywamo ibice biyagize. Ibigo bitangirwamo amaraso ubusanzwe byemera ko amaraso atangwa na:

- Abatanga amaraso ntibagaragarizwa imyirondoro.
- Abagize umuryango cyangwa inshuti z'umurwayi runaka (guha amaraso umuntu ku giti cye).
- Umurwayi ubwe (kwiha amaraso).

Amenshi mu maraso aterwa, atangwa n'abantu bo mu muryango mugari batagaragarizwa imyirondoro. Ni gake cyane, amaraso ashobora gutangwa n'umurwayi hanyuma akaza kongera kuyaterwa mu gihe bibaye ngombwa. Mu bindi bihe, umurwayi ashobora gusaba abandi kumuha amaraso by'umwihariko. Ibyo byombi biteza ibyago bitandukanye no kuba hakoreshwa amaraso yatanze n'umuntu utagaragarizwa imyirondoro. Ibi byago ugomba kubiganiraho n'umuganga wawe ndetse n'ikigo gishinzwe gutanga amaraso kirimo gukusanya amaraso.

Amaraso ashobora gutunganywa agakurwamo ibi bigize amaraso:

Insoro zitukura zakuwe mu maraso (Packed red blood cells, PRBC)

Utaremangingo twashyizwe mu mapaki tuba twakuwemo amatembabuzi yo mu maraso hafi ya yose ava mu maraso atarakurwamo ikintu na kimwe. Akenshi insoro zitukura zakuwe mu maraso zitangwa mu mitsi mu gihe cy'amasaha abiri kugeza kuri ane. Izi zitangwa kugira ngo zisimbure insoro zitukura zatakaye bitewe no kuva amaraso, kwangirika kw'insoro zitukura, cyangwa mu gihe cyangwa igihe umusokoro wo mu magufwa ukora insoro zitukura nkeya. Igabanuka ry'ikorwa ry'insoro rishobora kuba ryatewe no kunanirwa gukora neza kw'imisokoro yo mu magufa, kanseri ifata imisokoro, cyangwa ingaruka z'imiti ikoresheye mu kuvura kanseri, cyangwa kugira insoro nke mu mubiri bitewe no kuvuka imbura gihe. Insoro zitukura zirakenerwa kuko ari zo zitwara ogisijeni mu bice bisigaye by'umubiri.

Insoro zituma amaraso avura

Udufashi tw'amaraso ni ibice by'ingirabuzimafatizo bifasha mu kurinda cyangwa guhagarika kuva kw'amaraso cyangwa komora ibikomere, binyuze mu kuziba umwenge w'muyoboro w'amaraso hamwe n'izindi poroteyine zituma amaraso avura. Ubusanzwe udufashi tw'amaraso duterwa mu mutsi w'umujyana mu isaha imwe kugeza kuri abiri. Ni gake cyane dutangwa mu buryo buhoraho. Umuntu ashobora guterwa udufashi tw'amaraso mu gihe utwo afite tudakora neza bitewe n'imiti, uburwayi, kwangirika kw'imikorere y'umubiri (nk'iyo bitewe n'utwugi tw'udukorano tw'umutima), cyangwa mu gihe umusokoro w'amagufwa udakora neza bitewe n'indwara cyangwa se imiti ivura kanseri. Udufashi tw'amaraso dukenewe mu mubiri kubera ko tugira uruhare rw'ingenzi mu gutuma amaraso avura kugira ngo bihagarike kuva kw'amaraso.

Umushongi w'amaraso wakonjeshejwe (Fresh frozen plasma, FFP)

Umushongi w'amaraso wakonjeshejwe ni umushongi w'amaraso uba wakonjeshejwe ukabikwa nyuma gato umaze gutangwa n'uwatanze amaraso. Ubanza kuvanwamo ubukonje mbere yo kuwutera mu muntu. Ubusanzwe uterwa mu mutsi w'umujyana mu isaha imwe kugeza kuri abiri. Umushongi w'amaraso wakonjeshejwe ukoreshejwe igihe umuntu arimo kuva amaraso cyangwa hari poroteyine zimwe na zimwe abura zituma amaraso avura. Umushongi w'amaraso wakonjeshejwe ni ingenzi kuko uba urimo byinshi bitera amaraso kuvura bikenerwa mu guhagarika kuva kw'amaraso.

Cryoprecipitate (cryo)

Cryoprecipitate ni igice cy'amaraso kirimo gusa zimwe muri poroteyine zituma amaraso avura: poroteyine VIII, poroteyine XIII, poroteyine ya von Willebrand, na fibrinogene. Ibikwa mu bukonje hanyuma ikazakurwamo ubukonje mbere yo kuyitera umuntu. Ubusanzwe itangwa mu gihe cy'isaha imwe cyangwa ebyiri. Cryoprecipitate ikoreshejwe igihe umurwayi adafite kimwe mu bice by'ingenzi bigize amaraso byavuzwe haruguru bitewe n'indwara iterwa n'ubusembwa bw'ingirabuzimafatizo ikomeye, urugero nk'indwara yo kuvura kw'amaraso (Disseminated Intravascular Coagulation, DIC). Cryoprecipitate irimo poroteyine zimwe na zimwe z'ingenzi kugira ngo zikore ipfundo mu maraso afashe.

Amaraso atarakurwamo ikintu na kimwe

Amaraso atarakurwamo ikintu na kimwe ni amaraso akorwa binyuze mu guhuza insoro zitukura z'amaraso n'umushongi w'amaraso kugira ngo bikore ibigize amaraso y'umuntu. Aya maraso akoreshejwe cyane cyane mu gutera amaraso impinja zifite igipimo cyo hejuru cya bilirubine mu maraso cyangwa zifite ikibazo cyo kwangirika kw'insoro zitukura z' amaraso) bitewe n' impamvu zitandukanye. Ashobora kandi guhabwa umwana uri mu nda mu gihe afite ikibazo gikomeye cyo kwangirika kw'insoro zitukura.

Utoremangingo tw'umweru

Akaremangingo k'umweru kaba kagizwe na neutrophils, insoro z'umweru bishobora gufasha mu kurwanya ubwandu. Rimwe na rimwe, hari igihe hatangwa utoremangingo tw'umweru kugira ngo dufashe mu kurwanya ubwandu bukomeye mu bantu badafite neutrophils mu maraso yabo kandi batagize ubwivumbure bw'umubiri ku yindi miti. Utoremangingo tw'umweru dutangwa n'abantu batagaragarizwa imyirondoro, nyuma y'uko uwo muntu anyweye umuti wa steroid. Steroide ifasha mu kubona neutrophils kujya mu maraso kugira ngo zikusanywe. Amaraso akusanywe hakoreshejwe imashini itandukanya insoro z'amaraso (apheresis). Iyi mashini ifata inzoro zera z'amaraso hafi ya zose, maze mu gihe cy'amasaha menshi igasubiza amaraso yasigaye mu muntu wayatanze. Utoremangingo tw'umweru akenshi duterwa mu mutsi w'umujyana hagati y'isaha imwe n'amasaha abiri.

Ibibazo bishobora kuvuka

Rimwe na rimwe hari igihe umubiri utakira neza ibigize amaraso wahawe. Ibyinshi muri ibyo bibazo ntibikunze kubaho. Akenshi iyo bahagaritse guterwa amaraso barakira kandi rimwe na rimwe bamuha imiti y'inyongera, urugero nk'imiti igabanya umuriro cyangwa igabanya umusemburo. icyo kibazo nigikomera, hashobora gukenerwa ubundi buvuzi. Ubwo buvuzi bushobora kuba bukubiyemo gutunganya mu buryo bwihariye ibice by'ingenzi bigize amaraso mbere yo kuyatera umuntu cyangwa gutanga imiti mbere yo kuyatera umuntu.

Iyo hagaragaye ikibazo, abaganga bahagarika kumutera amaraso. Bimwe mu bice by'amaraso y'uwo muntu bizoherezwa ahasuzumirwa amaraso kugira ngo hakorwe ibindi bizamini. Umuyobozi ushinzwe iby'ubuvuzi azasuzuma ibisubizo by'ibizamini. Bazavugana n'itsinda ry'abaganga ku birebana n'intambwe zikurikira zikenewe kugira ngo mu gihe kizaza bazatere abantu ayo amaraso ameze neza. Ubusanzwe ibyo bifata isaha imwe cyangwa ebyiri. Bishobora gutwara amasaha menshi cyangwa se arenzeho bitewe n'icyo babonye. Ibibazo bishobora guturuka ku mpamvu ziterwa n'ubudahangarwa bw'umubiri, impamvu zitatewe n'ubudahangarwa bw'umubiri, ubwandu bwatwe mu amaraso, cyangwa ibimenyetso bishobora kugaragazwa nk'ibidafite aho bihuriye no guterwa amaraso. Ibyo byasobanuwe hepfo.

- Ibibazo biterwa n'ubudahangarwa bw'umubiri bishobora kubaho mu gihe ubudahangarwa bw'umubiri w'umuntu butakiriye neza ibigize amaraso. Bishobora kandi no kubaho mu gihe insoro ziri mu bigize amaraso zivumbuye ku nsoro z'umuntu cyangwa amatembabuzi. Bishobora kuba birimo:
 - Umuriro nta bindi bimenyetso (indwara y' umuriro idatewe no gutera amaraso mu mubiri).
 - Ubwivumbure bw'umubiri
 - Ubwivumbure bw'umubiri bukabije.
 - Gukora insoro zitukura cyangwa udufashi tw'amaraso bishobora kwibasira izindi nsoro zitukura cyangwa udufashi tw'amaraso uzaterwa mu gihe kizaza.
 - Kwangirika kw'ingirabuzimafatizo z'ibihaha gutewe no guterwa amaraso arimo abasirikare b'umubiri ([Gukomereka kw'ibihaha nyuma yo guterwa amaraso] Transfusion-related acute lung injury, TRALI)
 - Kwangirika kw'insoro zitukura kwatwe n'abasirikare b'umubiri, bibaho nyuma y'iminsi kugeza ku cyumweru umaze guterwa amaraso (ibibazo biza bitinze byo kwangirika kw'insoro zitukura byakomotse ko guterwa amaraso).
 - Indwara iterwa no kwanga kwakira ibigize amaraso watwe (Transfusion-associated graft-versus-host disease, TA-GVHD)
 - Purpura (ibikomere) iterwa n'abasirikare b'umubiri bangiza udufashi tw'amaraso.
- Ibibazo bidakomoka ku bwivumbure bw'umubiri birimo:
 - Amatembabuzi akabije kuba menshi ([Guterwa amaraso akarenga ubushobozi bw'uwrungano rw'amaraso] Transfusion-associated circulatory overload, TACO).
 - Kugabanuka k'umuvuduko w'amaraso (hypotension).
 - Potasiyumu irengeje urugero yatwe mu amaraso, ikeneye ubuvuzi.
 - Ubutare bukabije kuba bwinshi mu ngiramubizimafatizo. Ibyo ni ibintu bihangayikishije cyane ku bantu bagiye baterwa amaraso menshi mu gihe cy'ubuzima bwabo.
- Ubwandu
 - Ubwandu bushobora guterwa n'ikoreshwa rw'ibigize amaraso birimo bagiteri, virusi (nka Hepatite B na C, cyangwa SIDA, cyangwa CMV) cyangwa udukoko dutera indwara.

- Guterwa kimwe mu bice by'ingenzi bigize amaraso cy'utaremangingo tw'umweru bishobora guteza akaga gakomeye ugereranyije no guterwa ibindi bice by'ingenzi bigize amaraso. Kubera ko insoro z'umweru zidakomeza kubaho igihe kirekire nyuma yo gukusanywa, iki gice cy'amaraso kigomba guterwa vuba nyuma yo gukusanywa (mu masaha 24 vuba bishoboka). Kubera iyo mpamvu, izo nsoro ziterwa mu maraso mbere y'uko ibisubizo by'ibizamini by'indwara zandura biboneka. Abatanga utaremangingo tw'umweru baba basabwa kubahiriza amabwiriza akomeye cyane agenga ibyo gutanga amaraso kurusha abatanga ibindi bice by'ingenzi bigize amaraso. Muri rusange, bifatwa nk'ibitarimo akaga. Ibisubizo by'ibizamini bizamenyeshwa umuganga wawe bikimara kuboneka. Ubusanzwe ibi biba bukeye bwaho.

Bimwe muri ibyo bibazo byirindwa mu guhindura ibigize amaraso mbere yo gutera umuntu amaraso, nko kubishyira ku mirasire (birinda TA-GVHD). Ibindi byirindwa mu kubaza no gupima abatanga amaraso (ku bwandu). Buri gihe haba hari ibyago byo guterwa amaraso. Ubusanzwe ibyo byago biterwa no guterwa amaraso ntibiruta inyungu umuntu abona iyo aterwa amaraso.

Menya byinshi kuri ibi byago uganira n'itsinda ry'abita ku buzima, usoma ibisobanuro birambuye kuri izi ngaruka kandi unasura imbuga za interineti washishikarijwe.

Ibimenyetso by'ibibazo bishobora kuvuka

Ibimenyetso byo kwitondera birimo:

- Umuriro uri hejuru ya 100.6°F (38°C) wapimiwe mu kanwa.
- Umuvuduko w'amaraso urahinduka.
- Gutengurwa, umutwe, kuribwa mu nda, kuruka, guhitwa cyangwa kuribwa umugongo
- Inkari zijimye, uruhu cyangwa amaso bihinduka umuhondo, umunaniro udasanze (umunaniro ukabije).
- Gusesa ibiheri, kuryaryatwa, gusemeka cyangwa kubura umwuka cyangwa kugira ibibazo byo guhumeka
- Kubyimba ibirenge cyangwa utugombambari, cyangwa gufatwa n'inkorora utari ufite mbere yo guterwa amaraso.
- Ingaruka ziza zitinze. Mu bihe bidasanze, ingaruka ziza zitinze zishobora kuza nyuma y'iminsi cyangwa ibyumweru umuntu amaze guterwa insoro zitukura. Hamagara muganga w'umwana wawe niba umwana wawe ahinze umuriro cyangwa akagira uburibwe bushya nko kubabara umugongo, cyangwa yerurutse cyangwa [ahindutse umuhondo](#) (ibara ry'umuhondo ku mubiri n'amaso yera) nyuma yo guterwa amaraso.

Niba umwana wawe agaragaje ibimenyetso mu gihe cyangwa nyuma yo guhabwa ibiva mu maraso, hita uhamagara umuforomo wawe cyangwa muganga wawe.

Ibindi byakorwa

Rimwe na rimwe hari andi mahitamo. Abashinzwe kwita ku mwana wawe bashobora kuganira nawe ku birebana n'amahitamo ushobora kugira, hashingiwe ku burwayi bw'umwana wawe. Bimwe mu byo umuntu yakora harimo gukoresha imiti kugira ngo yirinde ibituruka mu maraso cyangwa gukoresha amaraso y'abandi bantu batari abatanze amaraso batagaragarizwa imyirondoro. Muri ibi harimwo:

- Imiti ishobora gufasha umusokoro w'amagufwa gukora insoro zitukura, insoro z'umweru cyangwa udufashi tw'amaraso.
- Imiti yihariye irimo poroteyine zituma amaraso avura, nka poroteyine zituma amaraso avura VIII cyangwa IX, cyangwa umuha imiti ibuzza amaraso kwipfundika (tranexamic acid, aminocaproic acid) cyangwa ukazamura urugero rw'ibintu bimwe na bimwe bituma amaraso yipfundika (DDAVP). Imiti ibuzza gukora mu buryo bwihariye imiti imwe n'imwe irwanya kuvura kw'amaraso (imiti ibuzza kuvura kw'amaraso).
- Ku bantu baba bagomba kubagwa, amaraso yabo atakara mu gihe cyo kubagwa bitewe no kuva amaraso ashobora gukusanywa mu gihe cyo kubagwa maze agasubizwa mu murwayi (igikorwa cyo kubika amaraso mu gihe cyo kubagwa).

Guha amaraso uwawe wihariye:

Kuba umuryango n'inshuti baha amaraso umuntu runaka wabo ni amahitamo. Ubu si bwo buryo bwiza bwo guha umurwayi amaraso kubera impamvu nyinshi. Abatanga amaraso batoranyijwe bashobora kuba bafite amaraso atameze kimwe n'ay'ukeneye amaraso cyangwa se amaraso yabo akaba atujuje ibipimo by'isuzuma. icyabitswemo amaraso gishobora kwangirika cyangwa kikabura ubushyuhe mu buryo bw'impanuka mu gihe cyo kuyabika cyangwa kuyatwara. Uwo muntu ashobora n'ubundi kuba yagira ikibazo bitewe n'ayo maraso. Niba wifuzaga ibindi bisobanuro, baza muganga. Ubwo busabaga bugomba gukorwa mbere y'ibyumweru cyangwa amezi menshi. Bikorwa n'ikigo cy'aho mutuye gishinzwe gutanga amaraso ku kiguzi runaka. Uwo muntu aba agomba kwifatira umwanzuro niba azemera guterwa amaraso y'umuntu utagaragarizwa imyirondoro, mu gihe nta maraso ahagije yakusanyijwe, cyangwa niba afite ikibazo gikomeye cyo kuva amaraso, bityo hakaba hakenewe andi maraso. Byongeye kandi, ibice bimwe na bimwe nka FFP cyangwa cryoprecipitate ntibishobora gukusanywa kugira ngo bitangwe bizahabwe umuntu runaka wihariye. Vugisha ikigo gishinzwe gutanga amaraso cya Hoxworth (Hoxworth Blood Center)

Kwiha amaraso:

Gutanga amaraso uzongera ugahabwa mu mubiri ni amahitamo. Ibi si byiza ku bantu benshi, cyane cyane ku barwayi b'abana. Amaraso wihaye ashobora kugira ikibazo mu gihe cyo gutunganywa bigatuma atazakoresheka. Ibi bishobora kuba bikubiyemo ko icyo abitsemo gishobora kwangirika cyangwa kikabura ubushyuhe. Uwo muntu agomba gutegura igihe azatangira amaraso habura ibyumweru cyangwa amezi runaka. Ayo maraso akusanyirizwa mu kigo gishinzwe gutanga amaraso ku giciro runaka. Uwo muntu ashobora gukenera kongera guterwa amaraso bitewe no kuva amaraso cyangwa ibindi bibazo. Uwo muntu yagombye gufata umwanzuro mbere y'igihe ku birebana n'icyo yakora mu gihe yaba akeneye guterwa amaraso y'umuntu utagaragarizwa imyirondoro.

Ibyifashishijwe mu kubona amakuru

Niba wifuzaga ibindi bisobanuro ku birebana n'ibice by'ingenzi bigize amaraso, baza muganga w'umwana wawe. Ushobora kandi kubona amakuru kuri izi mbuga:

- [Ishyirahamwe Rishinzwe Kuzamura Ibigendanye n'Amaraso n'Ubuwuzi Bwita ku Budahangarwa bw'Umubiri \(Association for the Advancement of Blood and Biotherapies, AABB\)](#)
- [Ikigo Cyita ku Maraso cya Hoxworth \(Hoxworth Blood Center\)](#)

Last Updated: 03/2024 by Kristina Prus, MD