Subtitle Format Igbo

Chapter 1 Introduction

Mmegharị ụda, usoro nke otu sel nge nke akwa mmadụ chara acha jiri bụrụ sel nari agụtaagụta nke okenye nwere ike ịbụ ịhe kachasi pụta ihie n'ụwa.

Ndị nchọpụta amatala ugbu a na ọtụtụ usoro ọrụ nke ahụ okenye na-arụ na-agba mkpọlọgwụ n'afọime - ọtụtụ mgbe tupu ọmụmụnwa.

Oge usoro otito tupu ọmụmụ nwa ka aghọtara dika ọge nkwadebe bụrụkwa ọge nke mmadụ na-eto eto na- enweta ọtụtụ ndọkọ, na mmụgharị nke ọtụtụ nka achọrọ maka ịdịndu ma amụchaa nwa.

Chapter 2 Terminology

Idiime na mmadụ na-anọrukarị rahụrahụ izu iri atọ na asatọ dịka esiri haa ya site n'oge njikọta spam nke nwoke na akwa nke nwanyị, ma ọ bụ site n'ọge ọtụtụime ruo n'ọmụmụ.

N'izu asatọ nke mbụ na-esote njikọta spam nke nwoke na akwa nke nwanyị, mmadụ na amalite otuto izizi n'ụwa ka ana akpọ "ẹmbrayo", nke pụtara "otito n'ime." Ọge a ana-akpọ ọge mmalite ọkpụkpụ, bụ oge amara amara eji akpụpụta ọtụtụ akụkụ ahụ ndị kachasi mkpa n'ahụ mmadụ.

Site na ngwụcha izu asatọ ruo na ngwụcha afọime, "mmadụ nke na-akpụta akpụta ka ana-akpọ fitọs," nke pụtara "nwa na-amụbeghị amụ" (ya bụ nwa ebu n'afọ). N'oge ana-akpọ oge nke fitọs (ya bụ oge ebu nwa n'afọ), anụ ahụ na–eto nke ukwu, akụkụ ahụ dị iche na–ebido rụwa ọrụ.

Ọge ọkpụkpụ na oge fitọs n'ile di n'ime ihe ọmụmụa n'ekwu maka oge kemgbe njikọ spam nwoke na akwa nwanyị.

The Embryonic Period (The First 8 Weeks)

Embryonic Development: The First 4 Weeks

Chapter 3 Fertilization

Dika bayoloji si kwuo, "mmalite otito mmadụ na–ebido na njikọta spam nwoke na akwa nke nwanyị," mgbe nwanyi na nwoke na- gwọkọta kromozon iri abụọ na atọ nke ya abụọ site na njikọta akwara ọmụmụnwa ha.

A na–akpo kari akwara ọmụmụnwa nke nwanyi "akwa," Mana ihe ekwesiri ka-akpọ ya bụ okite (oocyte)

N’otu aka ahụ, akwara ọmụmụ nke nwoke ka amara ebe niile dịka “spam” mana aha akara nabata bu spamatozuunu.

Isoro mgbe ewepụtara otu okite site na ihe na – echekwa akwa nwanyị site n’usoro ana akpọ ovuleshion, nke bu mgbe akwa sitere n’ihe na-echekwa ya pụta, okite na spamatozuunu na-ejikọta n’ime otu eriri akpa nwa, nke a na-akpọ falopian tuub mgbe ụfọdụ.

Eriri akpa nwa na ejikọta ebe akwa nwanyi na-anọ na akpa nwa ya.

Ihe ga amalite bụ otu sel ẹmbrayo nge nke a na-akpọ zaigọtụ, nke pụtara ntagbade ma ọbụ njikọta ọnụ.

Chapter 4   DNA, Cell Division, and Early Pregnancy Factor (EPF)

DNA
Kromozon iri anọ na isii nke zaigọtụ na - anọchite ihe pụrụ iche nke mbụ nke bụ njirimara agbụrụ zuru oke nke mmadụ ọhụrụ ahụ. Isi atụmaatụ a na - ebiri n’ime ntachiri ụmụ irighiri ihe gwọkọrọ agwọkọ nke ana - akpọ DNA. Ha na–ebu ndụmọdụ maka usoro otito nke ahụ niile.

Ụmụ irighi ihe a ana akpọ DNA yiri mbụbe ahikọrọ ahịkọ nke amara dịka heliks gbara mkpị. Ihe mebere ụkwụ mbube ndị a bụ ụmụ irighịri ihe ndị a gbara abụọ abụọ, ma ọ bụ ihe mgbakasi ukwu ana-akpọ Gwanine, sitosin, adenin, na tamin.

Gwanine na sitosin naanị na-agakọta, ebe adenin na tamin na - agakọtakwa. Otu n’ime sel ndị a na–enwe rahurahu njeri atọ ụmụ ịrigịhi ihe ndia gbara abụọ abụọ.

DNA di na otu sel na–enwe ama buru ibu nke bụ na ọbụrụ na – etinye ya n’okwu ederede, naani ideputa mkpụrụ edemede mkpado ukwu nke ọbụla ga–eri iwe ihe kariri mpempe akwukwọ kariri otu nde na okara!

Ọ bụrụ na edebe ya isi na isi, DNA nọ n’ime otu sel mmadu na – eru ihe dịka fiiti atọ na ụzọ otu n’ime atọ ma ọ bụ otu mita.

Ọ bụrụ na atụghasịa DNA niile nọ n’ime sel agụgụtaagụta, Ọ ga – agbati ihe ruru njeri maili iri isii na atọ Ogologo ga – esite n’ala ruo n’anyanwụ ma biagha chikwa ugboro nari atọ na iri anọ.

Cell Division
Rahurahu awa iri abụọ na anọ ruo n’awa iri ato mgbe njikọta spam nwoke na akwa nwanyị gachara, zaigọtụ na - agazụ nkerisi sel nke mbụ. Site n’usoro nke ana - akpọ mitosis, otu sel na – agbabi ụzọ abụọ, abụọ agbabie ụzọ anọ, weediri gawazie.

Early Pregnancy Factor (EPF)
Site n’ihe dịka awa iri abụọ na anọ rụọ iri anọ na asatọ mgbe njikọta spam nwoke na akwa nwanyi bidoro, E nwere ike ichọpụta afọime site ịchọputa homonụ nke ana–akpo “nzuko mbido odime nwanyi n’ime ọbara nne nwa.

Chapter 5   Early Stages (Morula and Blastocyst) and Stem Cells

Ebe ụbọchi atọ ruo ụbọchị anọ mbe mmekọta spam nwoke na akwa nwanyi gachara, nkerisi sel nke ẹmbrayo na – ewere oyiyi dị gburugburu, ẹmbrayo a ka ana - akpọ mọrụla.

Abia n’ụbọchi anọ rụọ na nke ise oghere ga - akpụta n’ime ẹtiti sel nke a na n’ime ẹmbrayo ka ana – akpozi blastosist.

Sel nọ n’ime blastosist ka ana - akpọ sel ukwu nke di n’ime na ewetakwa isi, ahụ, na akụkụ ndị ọzọ dị mkpa maka ntoputa mmadụ.

Sel ndị nọ n’ime sel ukwu nke di n’ime ka ana akpọ “ẹmbrayonic stem cell” maka na ha nwere ikikere ime ka otu n’ime ha ruo ihe kariri nari sel iri abụọ dị iche iche no n’ime ahụ mmadụ.

Chapter 6   1 to 1½ Weeks: Implantation and Human Chorionic Gonadotropin (hCG)

Mgbe ọ gagharichara n’ime eriri akpa nwa, ẹmbrayo nke izizi na-edewe onwe ya n’imerime akpa nwa nne ya. Usoro a ana – akpo nkunye n’ime akpa nwa, na – ebido na mkpuru ubæchi isii ma gwuchaa site n’ ụbọchị iri ruo ụbọchị iri na abụọ mgbe njikọ spam nwoke na akwa nwanyị gachara.

Sel si na ẹmbrayo na – eto eto ga – ebido mepụtaba homonụ nke ana - akpọ Human Chorionic Gondotropin or HCG, ihe nke anachọ putakari n’otụtụ nlele eji amata onye dị ime.

HCG na edu homonụ nke nne nwa ka ọ na – emekụta ọnọdụ nsọ nwanyị, na – eme ka afọ ime gaa n’ihu.

Chapter 7   The Placenta and Umbilical Cord

A na – eso nkunye n’akpa nwa a, sel ndị di na mpụta nke blastosisti na – eme ka enwee akụkụ nke ana – akpọ plasenta [ya bụ ịhe na-ejikọta akụkụ n’ime afọ nke nwanyị na nwa obu n’afọ. Ebe a ka nwa si enweta nrị ya], nke na - arụkwa ọrụ dịka ihe na - ejikọta nne na nwa, n’ime ka ọbara ha gazuo ahụ niile.

Plasenta na – ebubata ume nne, erimeri, homonụ na ọgwu n’ ime ahụ mmadụ ka na – etoputa etopụta; na-ewepụtakwa ihe niile anụ ahụ na - achọghị (ya bụ nsị); ọ nakwa – egbochi obara nne ka ọ ghara igwakọta n’obara nke ẹmbrayo na fitọs.

Plasenta na emeputakwa homonụ na anagidekwa ọnọdụ ahụ ẹmbrayo na fitọs ka ọdịtụ elu karịa nke nne ya.

Plasenta jikọtara mmadụ nke na-etolite site n’ime eriri na ejikọta nne na nwa (ya bụ eriri nwa).

Ike ọche ndu nke plasenta na nke ndị nọ n’ụlọ ọgwụ ndị dị ugbua, n’ebe ana – elebarara ndị ọria na-ria nke ukwu anya biazi hara

Chapter 8 Nutrition and Protection

N’izu nke mbụ, sel nke dị n’ime sel ukwu na - akpụpụta ogo abụọ ana - akpọ haipoblastị nakwa epiblastị.

Haipoblastị na – eme ka enwe nkochi ime akwa nwa, nke bụ otu n’ime akụkụ nke nne si ebuga nri nye nwa nke na amalite ọkpụkpụ.

Sel si na epiblastị na - ekepụta mgbidi ana - akpọ amniọnụ, n’ime nke ẹmbrayo na fitọs (ya bụ nwa ebu n’afọ) ma emesia na – eto ruo oge ọmụmụ.

Chapter 9 2 to 4 Weeks: Germ Layers and Organ Formation

Na rahụrahụ izu abụọ na ọkara, epiblastị ekeputala akwara atọ nwere ọrụ ha pụrụ iche, ma ọ bụ ngidịrigi izizi, ana - akpọ ektodamụ, endodamụ, na mesodamụ.

Ektodamụ na eweputa ọtụtụ akụkụ gunyere ụbụrụ, ọgidigi azụ, irighiri akwara, anụ ahụ, mbọ, na ntụtụ isi.

Endodamụ na - ekepụta usoro nke akụkụ okuku ume na akụkụ ogwugwa nri, na-ewepụtakwa ọke ogan ndị dị oke mkpa dị ka umeji n’ononukporokọ.

Mesodamụ na - akpụpụta mkpụrụobi, akịrị, ọkpụkpụ, katileji [ya bụ ịhe dị na ahụ mmadụdịka ọkpụkpụ ma na-anọkwa anọ], mọzụlụ, sel ọbara, na akụkụ ndị ọzọgasi.

N’izu atọ ụbụrụ ekeribela n’ụzọ ato dị mkpa nke ana -akpọ ụbụrụ dị n’iru, na ụbụrụ nke dị na etiti, nakwa ụbụrụ nke dị na azụ.

Ntolite nke akụkụ okuku ume na nke ogwụgwa nri na – amalitekwa nke ha.

Dika sel ọbara nke mbụ na – aputa n’ime nkochi ime akwa nwa, iko ọbara na amalite itopụta n’ahụ ẹmbrayo niile, tuubu nke mkpụrụobi na aputakwa ihe.

N’otu mgbe ahụ, mkpụrụobi nke na eto ọsọ ọsọ ekeji sibe n’ime onwe ya dịka ọnọdụ digasi iche iche malitekwa tobe.

Mkpụrụobi ga – ebido kụba n’izu atọ na otu ụbọchi nke na – esote mmekọta spam nke nwoke na akwa nke nwanyị.

Ihe na-ebughari mmẹ ẹ n’ahụ n’ile bụ ihe nke mbụ n’ahụ mmadụ, ma ọ bukwa otu ogan yiri onwe ha, na-enweta ọnọdụ na - arụ orụ ofuma.

Chapter 10 3 to 4 Weeks: The Folding of the Embryo

N’ime izu atọ na izu anọ, atumatụ nke ahụ mmadụ na - amalitekwa di ka ụbụrụ, ogidigi azụ, na mkpụrụobi nke ẹmbrayo, a na – amata ha n’enweghi nsogbu otu aka ahụkwa, ebe ihe na-ekochi ime akwa nwa dị.

Otito ọsịsọ na – ebute njikọ nke ẹmbrayo amarala na ọ di abadaba. Usoro dị otu a na etinyekọta mpaghara nkochi ime akwa nwa n’ime mgbochi nke sistem na - ahụ maka ogwugwa nri na akpụpụtakwa eze obi nakwa oghere dị n’afọ nke mmadụ na – etote etote.

Embryonic Development: 4 to 6 Weeks

Chapter 11   4 Weeks: Amniotic Fluid

N’ izu anọ amịnịọn doro anya na agba ẹmbrayo gburugburu n’ihe dịka akpa mmiri juru. Mmiri aga a, ana - akpọ akpa mmiri ọmụmụ, na – echedokwa ẹmbrayo maka ihe mmerụ ahụ.

Chapter 12   The Heart in Action

Mkpụrụobi na - akuru ihe dịka ugboro otu nari na iri na atọ n’otu nkeji.

Hụba ama ka mkpụrụobi si – agbanwe agwa mgbe obara n’a-abata na-apụkwa n’akpa ya n’otu ụda.

Mkpụrụobi na-akụ nhatanha ugboro nde iri ise na anọ tupu ọmụmụnwa nakwa ihe kariri ugboro njeri atọ na nari puku abụọ n’ije ndụ onye gbara afọ iri asatọ.

Chapter 13   Brain Growth

Otito ụbụrụ nke dị osọ ọsọ na-apụta ihe site na-mgbawe nke anụahụ nke ụbụrụ dị n’iru, ụbụrụ dị n’etiti, na ụbụrụ nke dị n’azụ.

Chapter 14   Limb Buds

Otito nke ukwu n’aka yana mpụta nke akwa aka n’ukwu, n’izu nke anọ.

N’oge dị otu a,oghere ihe nke anụahụ aputala, n’ihi na osisi ike ya bụ nke naani otu sel.

Anụ ahụ na esi ike, ọ ga-eme ka oghere ihe a ya lakpuo, nke putara na anyi ga enwe ike ilele naanị ogan ndị nke nọ n’ime ka ha ga esi too site oge ahụ ruo ihe dịka otu ọwa ọzọ.

Chapter 15   5 Weeks: Cerebral Hemispheres

N’etiti izu anọ na izu ise, ụbụrụ ga-aga n’ihu n’ito ọsọ ọsọ na ekewa n’uzo ise ahụrụ anya.

Isi nwa na-ewe ihe dika otụ n’ime atọ nke ogo niile nwa nọ n’afọ.

Akụkụ ụbụrụ nke amamihe apụta, ga-ewere nwayọọ bụrụzie akụkụ ụbụrụ nke kachasi ibụ.

Ọrụ niile nke akụkụ ụbụrụ amamihe ga emecha jikota gunyere echiche, mmụta, ncheta, ekwumekwu, ịhụ ụzọ, inụ ihe, mmeghari onwe, na imata ụzọ esi eme ihe.

Chapter 16 Major Airways

N'ime sistem okụkụ ume, ngụ akanri na nke akaekpe apụtachala ọ ga-emechakwaa jikọta oghere eji ekunye ume, ma ọbụ opi akpịrị nakwa ngụgụ.

Chapter 17 Liver and Kidneys

Hụba ama umeji di nke ukwu na-eju n'afọ n'akụkụ mkpụrụobi na-eti eti.

Akiri nke na anægide na-aputa n'izu nke ise.

Chapter 18 Yolk Sac and Germ Cells

Ihe na-ekochi ime akwa na-ebu sel æmumu nke mbido nke ana-akpọ sel nke izizi. N'izu ise sel nke izizi ndịa agafele na ọgan ọmụmụnwa nke dị n'akụkụ akịrị.

Chapter 19 Hand Plates and Cartilage

N'izu ise kwa, embrayo enwela ọba aka, Ihe siri ike dịka ịhe na-adọ adọ nke dị na-ahụ mmadụ na-amalite putaba n'izu ise na ọkara.

Ebe a anyi na-ahụ ọba aka ekpe na ngwoaka n'izu ise na mkpụrụ ụbọchị isii.

Embryonic Development: 6 to 8 Weeks

Chapter 20 6 Weeks: Motion and Sensation

N'izu isii akuku ụbụrụ nke ammamihe na-etolite N'uzọ ahaghị ịha, karịa akụkụ ụbụrụ ndị ọzọ.

Embrayo ahụ ebido ịmmeghari ahụ n'eyighi eyi nakwa ịmmeghari ahụ nke na-emetuta ya. Udị mmeghari ahụ a na-adị mkpa iji kwalite ezigbo otito nke ụmụ irighiri akwara jikọtara ime ahụ.

Imetụ aka n'akụkụ ebe ọnụ dị na-eme ka embrayo sere isi ya ozigbo.

Chapter 21 The External Ear and Blood Cell Formation

Nti nke ana-ahụ anya amalitele iwere ọdịdị ya.

N'izu isii, Ọkpụkpụ sel nke ọbara ebidola ịpụta N'ime umeji ebe limfosaiti ewerela ọnọdụ. Udị sel ọbara ọcha a bụ ihe dị oke mkpa n'otito nke sistem na-egbochi oria dị iche iche.

Chapter 22   The Diaphragm and Intestines

Daiafram, bụ ihe mbụ dị mkpa eji eku ume, ka ana akpụtakarị n’izu isii.

Otu akụkụ eriri afọ ga-aputagodi n’ime eriri nwa. usoro a, ana akpọ fisiọlọgikal henieshionụ, na-emeghere ọgan ndi ọzọ na-etoputa n’ime afọ ụzọ.

Chapter 23   Hand Plates and Brainwaves

N’izu isii ọbaaka ebido sawa abadaba.

Ụbụrụ echiche anọdulari kemgbe izu isii na mkpụrụ ụbọchị abụọ.

Chapter 24   Nipple Formation

Ọnuara ebido pụpụtawa n’akụkụ ahụ nwa obere oge tupu ha ruo ebe ha kwesiri ịnọ yaa bụ n’ihu ezeobi.

Chapter 25   Limb Development

N’izu isii na okara ataaka apụtala nke a ga ahụ mara ozigbo, mkpụrụ aka ebidole gbasiwa, ana-ahụkwa mmeghari aka.

Mkpụpụta okpụkụ, nke ana-akpọ osifikeshịọn, ebido n’ime nkọlọ ya, ma ọ bụ ækpụkpụ ukwu olu, nakwa ọkpụkpụ agba elu na nke ala.

Chapter 26   7 Weeks: Hiccups and Startle Response

Ahutakwala echuchuu n’izu asaa.

Aga ahụlikwa mmeghari ụkwụ ugbua, tinyere aziza na-eme n’amaghị ama.

Chapter 27   The Maturing Heart

Akụkụ anọ nke mkpụrụobi etoputala nke ọma. Dika okwesịrị, mkpụrụobi na-etiru ihe dịka ugboro otu nari na iri isii na asaa n’ime otu nkeji.

Ọdụdọ nke mkpụrụobi na-adi n’izu asaa na ọkara n’egosiputa usoro na-eyite nke okenye.

Chapter 28   Ovaries and Eyes

N'ụmụka ndị nke nwanyị, e nwere ike ihụta akpa akwanwa ha n'izu nke asaa.

N'izu asaa na akara, ọdụ anya aputago ebe ana-ahụ ya, nakwa eluanya amalite oge ito n'ike n'ike.

Chapter 29   Fingers and Toes

Mkpụrụ aka agbagasiwala mkpụrụ ukwu na-ejikọta ọnụ naani n'ebe mpụpụta.

Aka nwekwara ike ibiakọta ọnụ ugbu a, otu a ka odikwa ụkwụ.

Ọkpụkpụ ikpere aputakwala.

The 8-Week Embryo

Chapter 30   8 Weeks: Brain Development

N'izu asatọ ụbụrụ etochaala nke ọma ma werekwa ihe dịka okara n'ibu embrayo buru.

Otito na-agi n'ihu n'ụzọ dị nke ukwu.

Chapter 31   Right- and Left-Handedness

N'izu asatọ, ihe dịka pasentị ruru iri asaa na ise n'ime embrayo na-ezipụta ọmụme akanri ha karia. Nke fọdụrụnụ ekee ya ụhamụha n'ime ndị na-eme aka ekpe na ndi nere ike ime aka abụọ hau. Nke a bụ ihe mbụ na-egosipụta omume akanri ma ọ bụ aka ekpe.

Chapter 32   Rolling Over

Akwụkwọ na-akowa ihe gbasara ụmụaka kowana ikikere ntụghari ka nke na-aputa ihie site n'izu iri ruo n'izu iri abụọ mgbe amuchara nwa. Ka osila dị, ndikota dị mma otu a ka egosiputara n'isi mbụ n'ọnọdụ nwatakiri n'ime akpa mmiri ọmụmụ. Naanị ike achọrọ enweghi nke eji emeri ikikere kariri nke dị na mpụta akpanwa na-egbochi ụmụaka amụrụ ohụrụ ịtụghari atụgharị.

Embrayo na-agbasiwanyega ike n'oge dị otua.

Usoro mmeghari nwere ike idi nwayọ ma ọ bụ dị ọsọ ọsọ, otu ma ọ bụ ugboro ugboro, n'amaghi ama ma ọ bụ amara ama.

Ntụghari isi, nseti olu na mmetụta aka ruo n'ihu na-abiawanye ugboro ugboro.

Imetụta embrayo aka na-eme ka enwee anya uhie, mmeghari agba, ikikere iji ihe, na ntụpụta mkpụrụ ukwu.

Chapter 33 Eyelid Fusion

N'etiti izu nke asaa na izu nke asatọ, nkuanya nke elu na nke ala n' etochipụ ọsọ ọsọ n'elu anya ma mee ka ha atagidere ofu ebe.

Chapter 34 "Breathing" Motion and Urination

N'agbanyeghi n'ikuku adịghị n'ime akpanwa, embrayo na-ezuko okuku ume kwa mgbe kwa mgbe n'ime izu asatọ.

N'oge a akịrị emeputawago mmamịrị nke o na eziga n'ime akpa mmiri ọmụmụ.

Na embrayo nke ndị nwoke, mkpụrụ amụ na-akpụpụta akpụpụta amalitere imepụta na iziputakwa testoserọnu (ya bụ homonu nke nwoke).

Chapter 35 The Limbs and Skin

Ọkpụkpụ, njikọ, akwara ike, ụmụ irighiri akwara, na oghere ọbara nke aka n'ụkwụ e were nwayọ na-eyitekwa nke ndị okenye.

N'izu asatọ akpụkpọ anụahụ dị mpụta, aburuzie ngidingi akpụkpọ, tufuchaa nnabata ihie ya.

Agbaanya etolite mgbe aji bidoro putaba n'ọnụ ya.

Chapter 36 Summary of the First 8 Weeks

Izu asatọ a bụrula ngwụcha nke okpụkpụ nwa.

N'oge di otu a, embrayo etole site na sel nge ruo n'ihe ruru sel otu njeri nke ga-akpụpụta akụkụ ahụ mmadụ ihe karịrị puku anọ.

Ugbua embrayo nweziri ihe kariri pasentị iri itoolu n'ime ihe ana-ahụ n'ahụ nke ndi okenye.

The Fetal Period (8 Weeks through Birth)

Chapter 37 9 Weeks: Swallows, Sighs, and Stretches

Oge nke fịtọs ga-aga n'ihu ruo n'oge ọmụmụ nwa.

N'izu itoolu, ịmi aka ebido nwa ebu n'afọ nwere ike ilo mmiri omụmụ.

nwa ebu n’afọ nwekwara ike ijide ihe aka, megharia isi ya ka ọ gaa ihu ma ọ bụ azụ, mepee ma mechikwaa agba ya, megharia ire ya, rie ude nakwa gbatia.

Irighiri akwara nọ n’ihu, nakwa nke nọ n’ọba aka, na makwa n’oba ụkwụ nwere ike ịmata mgbe emetụtara aka dị mfe.

"N’imeghari ahụ maka mmetụta dị mfe n’ọ ọba ụkwụ," nwa ebu n’afọ ga-ehulata ukwu ya na ikpere ya, o nwekwara ike rọkọlata mkpụrụ ụkwụ ya.

Ugbua eluanya emechichala nke ọma.

N’ime ekọ akpịrị, akwara nke eji ekwu okwu na-aputa n’egosipụta mmalite ntoputa nke ebe okwu si apụta.

N’ime ụmụaka ndi nke nwanyi, a ga amata nke bụ akpanwa ya, sel ọmụmụ akabeghị aka, nke ana-akpo ogonia, na-enwoghari n’ime akpaakwa nwa.

Ihe eji ama nke nwoke na nke nwanyi ebidole kewaputasiwa onwe ha dika nke nwoke ma ọ bụkwa nke nwanyị.

Chapter 38   10 Weeks: Rolls Eyes and Yawns, Fingernails & Fingerprints

Otito di egwu ana-enwe n’ime izu nke itoolu na nke iri na ebuli arụ nwa n’ihe kariri pasenti iri asaa na ise.

N’izu nke iri mmetuta nke nkuanya nke elu n’akpata igwodata anya ala.

nwa ebu n’afọ na-eghe ughere ma na-emepekwa na-emechi ọnụ ya kwa mgbe kwa mgbe.

Otụtụ ụmụaka ebu n’afọ na-ami isi aka nri ha.

Akụkụ eriri afọ nọ n’ime eriri nwa abiaghachiwa n’ime oghere dị n’ime afọ.

Osifikeshionụ [ya bụ mgbe ihe niile eji akpụ ọkpụkpụ na-abanye n’ebe digasị iche iche na emekwa ka ọkpụkpụ sie ike

Mbọ aka na mbo ụkwụ amalitela tobe.

Akara mkpụrụaka pụrụ iche na-aputa ihie n’izu iri site na njikọta spam nwoke na akwa nwanyi gasịrị. Akara a nwere ike ịbụ ihe iruba ama na ndụ n’ile mmadụ.

Chapter 39   11 Weeks: Absorbs Glucose and Water

N’izu iri na otu imi na egbugbere ọnụ etoputachaala nke ọma. Dika ọ di n’akụkụ ahụ ndị ọzọ, ọdịdi ha na-agbanwe n’ogo ọbụla nke mmadụ toruru na ndụ.

Eririafọ ebido mitawa glukos nakwa mmiri nke nwa ebu n’afọ loro.

N’agbanyeghi na ana-amata ma nwa ọ bụ nwoke ma ọ bụ nwanyi na njiko spam nke nwoke na akwa nke nwanyi, ugbu a ihe nwoke na nwanyi ji enwe mmekọrita ke dị na mpụta aputachala nke ọma ugbua nke bụ na aga-amata ihe dị iche dị ka ọbụ nwoke ma ọ bụ nwanyị.

Chapter 40 3 to 4 Months (12 to 16 Weeks): Taste Buds, Jaw Motion, Rooting Reflex, Quickening

N’etiti izu iri na otu na izu iri na abụọ, arụ fitọs na-abawaye ruo ihe dị ka pasenti iri isii.

Izu iri na-abụọ n’egosi ngwucha ụzọ nke mbụ n’ime atọ, ma ọ bụ ụzọ atọ nke ekere n’ oge afọime.

Ihe nd eji anụ ụtọ ndị pụruụ iche biaziri ugbu a jupute n’ime ọnụ. N’ oge ọmụmụ nwa, ihe ndi na-eme ka nwa nụọ ụtọ ka ga-anọkwa ya naani n’ire na n’okpo ọnụ.

Njaghari afọ na-amalite n’oge dị ka izu iri na abụọ ma gakwaa n’ihu ruo ihe dika izu isii.

Ihe mbụ nwa amụrụ ohụrụ n’anyụputa ka ana-akpọ mekoniọmụ. Emebere ya site n’ụmụ irighiri ihe na-agwa nri, ihe ndi na-edozi ahụ, nakwa sel ndị nwụrụ anwụ nke ihe na-agwa nri wụsasịrị.

N’izu iri na abụọ, ogologo aka a chọla iru etu otosịrị iru n’ogo nke ahụ mmadụ. (ya bụ ogo ahụ nwa ahụ) Ụkwụ na-ewe ogologo oge n’igaru ogo etu otosịrị iru.

Ewezụga azụ na elu isi, ahụ nwa ebu n’afọ niile na-emegharị na mmetụta aka dị mfe.

Ndiiche na-adị na otito na-esite ma mmadụ abụ nwoke ma ọbụ nwanyị na aputa ihie mgbe nke izizi. Iji maa atụ, ụmụaka ebu n’afọ ndị nke nwanyi na-ezikoputa mmegharị nke agba ha ugboro ugboro karia ụmụ nwoke.

Ndiiche dị na mmegharị nke nlubiri ahụrụ na mgbe mbụ, mmetụta aka n’akụkụ ọnụ na-eme ka nwa tugharịa ebe ænye, ma ọbụ ihe, metutara ya aka nọ nakwa megharikwa ọnụ ya. Mmegharia ka ana-akpọ "rutin refleks" ọ na-adigidekwa ma amụchaa nwa, na-enyere nwa amụrụ ọhụrụ aka ịchọta ọnụ ara nne ya n’oge ana-enye ya ara.

Ihu nwa ana-aga n’ihu na-aka aka ka abuba na-amalite ijuputa nti nwa nakwa ka ntolite eze malitekwara.

N’izu iri na ise, sel na-akpụ ọbara abata na-amụba n’ime ụmị ọkpụkpụ. Imilikiti ọkpụkpụ sel na-ebubata ọbara ga-amalite ebe a.

N’agbanyeghi, na embrayo na-amalite immeghari ahụ n’izu isii, nwanyi dị ime na-enwetụta mmeghari ahụ izizi nke nwa ebu n’afọ n’etiti izu iri na anọ na izu iri na asatọ. N’odinaala, ihe dị otu a ka ana-akpọ kwikinin (ya bụ ịnụtụta mmegharị ahụ izizi fitọs).

Chapter 41 4 to 5 Months (16 to 20 Weeks): Stress Response, Vernix Caseosa, Circadian Rhythms

N'izu iri na isii usoro gunyere nfanye alanga n'ime afọ nke nwa ebu n'afọ na-akpalite homonụ malitere na mmeghari ahụ na gbapụtakwa nọradrenalini, ma ọ bụ nọrepinefrini, n'ime ọwa ọbara. Ụmụaka amụrụ ọhụrụ na ndi okenye na-enwe mmeghari̩ ahụ yiri onwe ya n'ihe gbasara usoro ọbula na emekpa ha ahụ.

Na sistem okukuume, osisi nke ngụ fodụrụ ntakiri ka o zuo oke.

Otu ihe nchekwa dị ọcha, ana - akpọ "veniks kasiosa", ga – ekpuchizi nwa ebu n'afọ ugbua. Veniks na – echekwa anu ahụ site n'ihe mgbakasi ahụ si na mmiri ọmụmụ.

Site n'izu iri na itoolu, mmeghari ahụ nwa ebu n'afọ,usoro ọkụkụ ume, na nnọdụ mkpụrụ obi ebido sowe eregede kwa ụbọchị nke ana - akpọ sikadian ridims (ya bụ etu eji emepụta homonụ na-eme ka ihe niile rụọ ọrụ ọfụma).

Chapter 42 5 to 6 Months (20 to 24 Weeks): Responds to Sound; Hair and Skin; Age of Viability

N'izu iri abụọ koklia, nke bụ ọgan eji anụ ihe, eruola ogo nke okenye n'ime otito zuru oke nke imerime nti. Site ugbu a gaa n'ihu, nwa ebu n'afọ ga-emeghari nyere ọtụtụ ụda dị iche iche.

Ntutu ga-ebido towe n'isi nwa.

Ngidingi na odidi anụ ahụ niile aputachaala, tinyere oghere gbara ukwu aji gburu gburu nakwa akụkụ ahụ mmadụ na-ewere imilikiti ihe n'ime mmee mmadụ dote ha ma ọbụ wepụ ha n'ahụ mmadụ

N'izu iri abuæ na otu ruo n'izu iri abuæ na abuæ mgbe njiko spam nwoke na akwa nwanyi ga chara, ngụ ga-enwetatụ ikikere iji iku ume. Nke a ka a na-ewe ka mgbe otito nwa nọ n'ime akpa nwa Ga ezurugor ya nke bụna onwere ike ibilite ndụ makana ịdị ndu na mputa akpanwa ga-enwe isi n'ebe ụfọdụ nwa ebu n'afọ nọ. Ọtụtụ iga n'ihu na nchọpụta nke ndi na-ahụ maka ahụ ike na-eme ka enwe ike ichekwa ndụ nke ụmụaka a mụrụ n'erughi oge ha tosiri iru tupu amụọ ha (ya bụ ụmụaka akachaghị aka).

Chapter 43 6 to 7 Months (24 to 28 Weeks): Blink-Startle; Pupils Respond to Light; Smell and Taste

N'izu iri abụọ na anọ, elu anya emepekwa ọzọ nwa ebu n'afọ na-eziko mmeghari ntabi anya nke n'eyi gi eyi. Mmeghari a n'ebe uda ike nọ na-etoputakari n'oge n'ebe nwa ebu n'afọ nke nwanyi nọ.

Ọtụtụ ndị nchọputa kowara na mkpughe n'ebe oke uda nọ nwere ike imetuta ahuike nke nwa ebu n'afọ. Nsogbu nwere ike ịpụta gunyere mgbati ubara nke ọnọdụ mkpụrụobi, nwa ebu n'afọ ilo ihe karia ka atụrụ anya ya na mgbawe agwa n'eyi eyi. Ụfọdụ nsogbu mwere ike idaputa ma emechaa gunyere na nwa agaghi anụzikwa ihe.

Okuku ume nwa ebu n’afọ nwere ike ịla elu nke ukwu ihe dika nkuru ume na nkụpụta ugboro iri anọ n’anọ dị n’otu nkeji.

N’oge ọnwa atọ nke ikpe azụ n’afọime, otito osisọ nke ụbụrụ na-eburu umele ihe kariri pasenti iri ise nwa ebu n’afọ kuuru. Arụ uburu na-abawanye ruo ihe dị ka pasentị narị anọ ma ọ bụ narị ise.

N’izu iri abụọ na isii mkpụrụ anya ebido gbapụtawa anya mmiri.

Ọdụanya na - emeghari n’oge ebe ihe dị n’ihe dị ka izu iri abụọ na asaa. Mmeghari a na – echekota oke ihe n’erute n’oduanya na ndụ niile onyeahụ.

Ihe niile a chọrọ iji nụ isi nke ọbụla amalitele rụwa ọrụ. Ọmụmụ gbasara ụmụaka akachaghị aka gbara ama ikikere iji chopụta isi n’oge dị ka izu iri abụọ na isii mgbe njiko spam nke nwoke na akwa nwanyi gachara.

Idote ihe dị ụtọ n’ime mmiri ọmụmụ na-ebulite ugboro ole nwa ebu n’afọ na-elo ihe. N’idi iche, e nwere mgbada n’usoro nwa ebu n’afọ si elo ihe sotere iwebata ihe na-elu ilu. Mgbanwe ozi dị n’iru kwa mgbe kwa mgbe na-esotekwa.

Site usoro ntụpụ ụkwụ yiri agam ije, nwa ebu n’afọ atughariịwa.

Nwa ebu n’afọ adighịzịkwa ka ọhikọrọ ahịko etu ọdị mbụ ka abụba ndị ọzọ na-apụta n’okpuru anụahụ. Abụba na arụ orụ di mkpa n’ikwagide udịdị ahụ na-edọbakwa umele mgbe amuchara nwa.

Chapter 44   7 to 8 Months (28 to 32 Weeks): Sound Discrimination, Behavioral States

N’izu iri abụọ na asaa nwa ebu n’afọ nwere ike imata ihe dị iche di n’uda dị elu na nke dị ala.

N’izu iri atọ, a na ahụkarị mmeghari iku ume ugbua ọ nakwa eziko site n’oge na pasentị iri ato ruo iri anọ n’ebe nwa ebu n’afọ nọ.

Mgbe oruru n’onwa anọ nke ikpeazụ n’afọ ime, nwa ebu n’afọ na-egosiputa usoro ọrụ ejikwatara nke ọma a nwekwa mgbe ezum ike. Usoro omume ndia n’egosiputa mbawanye ihe ga-ebute nsogbu nke sentral nevọs sistem.

Chapter 45   8 to 9 Months (32 to 36 Weeks): Alveoli Formation, Firm Grasp, Taste Preferences

Na nhatanha izu iri atọ na abụọ, ezigbo nkọlọ, ma ọ bụ sel akpa ume, amalite itolite na ngụgụ. Ha ga na-etolite tutu ruo afọ asatọ amụchara nwa.

N’izu iri atọ na ise nwa ebu n’afọ amarala ejidesi ihe aka ike.

Mkpughe nwa ebu n’afọ n’ebe ihe dị iche dị dika ọ na-emetụtụ ụdị ụtọ nwa n’achokarị ma amucha ya. Ima atụ, ụmụaka ebu n’afọ ndị nne ha riri anaisi, ihe na-enye likoraịsị ụtọ ya, gosiri nnabata anaisi mgbe amuchara ha. Ụmụaka amụrụ ohụrụ ndi eweghi mkpugbe mgbe ya nọ n’afọ kpọrọ anaisi asị.

Chapter 46   9 Months to Birth (36 Weeks through Birth)

Nwa ebu n’afọ na-amalite njem ime omume site n’inuputa homonụ nke ana-akpọ estrojin nke ukwu nke a na-amalite ntughari site na nwa ebu n’afọ buruzie nwa amụrụ ọhụrụ.

Ihe ejiri mara ime omume bụ mbili elu na mgbadata sirike nke akpanwa, nke ga-abụzị ọmụmụ nwa.

Site na njikọ spam nwoke na akwa nwanyi ruo n’ọmụmụ nwa ma ọ bụ karia oge ahụ, otito mmadụ na-agbanwe agbanwe na-agakwa n’ihu ma dikwa mgbagwojuanya. Ihe nchọpụta ohụụ gbasara usoro a togburu onwe ya. gosiri mmetụta dị mkpa na n’otito nwa ebu n’afọ na ahụike nke ndụ.

Dika nghota anyi n’ihe gbasara mmalite otito mmadụ na abawanye, otu a ka ikikere anyi ikwalite ahụike na-abawanyekwa ma mgbe adị ime ma mgbe amụrụ nwa.