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| Table 1: Second Affiliated Hospital of Chongqing Medical University thyroid trimester reference range. |
|  | Non-pregnant | First trimester | Second trimester | Third trimester |
| TSH(µIU/ml) |  0.35-5.00 | 0.05-5.17 | 0.39-5.22 | 0.60-6.84 |
| T3 pmol/L | 2.1-6.3 |  |  |  |
| T4 pmol/L |  9.5-24.5 | 12.91-22.35 |  9.81-17.26 | 12-15.71 |
| TSH: Thyroid-stimulating hormone, T3: Triiodothyronine, T4: Thyroxine |

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| Table 2: Nanjing Hospital Thyroid trimester Reference range[14] |
|  | Non-pregnant  | First trimester | Second trimester | Third trimester |
| TSH(mIU/L) |  | 0.02 to 3.78 | 0.47 to 3.89 | 0.55 to 4.91 |
| FT4pmol/L |  | 13.93 to 26.49 | 12.33 to 19.33 | 11.38 to 19.21 |
| TT4 nmol/L |  | 103.39 to 319.43 | 92.28 to 234.88 | 83.54 to 258.12 |
| TSH: Thyroid-stimulating hormone, TT4: Total thyronine, FT4: Free thyroxine |

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| Table 3: Reference range of serum TSH and FT4 of Chinese women during pregnancy (2.5-97.5 percentile) |
| TSH(mU/ L) | FT4 (pmol/ L) |
| Reagent Company | First trimester | Second trimester | Third trimester | First trimester | Second trimester | Third trimester | method |
| DPC | 0.13~3.93 | 0.26~3.50 | 0.42~3.85 | 12.00~23.34 | 11.20~21.46 | 9.80~18.20 | Chemiluminescence immunoassay law |
| Abbott | 0.07~3.38 | 0.34~3.51 | 0.34~4.32 | 11.30~17.80 | 9.30~15.20 | 7.90~14.10 | Chemiluminescence immunoassay law |
| Roche | 0.09~4.52 | 0.45~4.32 | 0.30~4.98 | 13.15~20.78 | 9.77~18.89 | 9.04~15.22 | Electrochemical immunoassay law |
| Bayer | 0.03~4.51 | 0.05~4.50 | 0.47~4.54 | 11.80~21.00 | 10.60~17.60 | 9.20~16.70 | Chemiluminescence immunoassay law |
| Beckman | 0.05~3.55 | 0.21~3.31 | 0.43~3.71 | 9.01~15.89 | 6.62~13.51 | 6.42~10.75 | Chemiluminescence immunoassay law |
| DiaSorin | 0.02~4.41 | 0.12~4.16 | 0.45~4.60 | 8.47~19.60 | 5.70~14.70 | 5.20~12.10 | Chemiluminescence immunoassay law |
| Tosoh | 0.09~3.99 | 0.56~3.94 | 0.56~3.94 | 10.42~21.75 | 7.98~18.28 | 7.33~15.19 | Chemiluminescence Immunoassay |
| Copied from Guideline on diagnosis and management of thyroid disease during pregnancy and postpartum (2nd edition) Ad Hoc writing committee for guidelines on diagnosis and management of thyroid disease during pregnancy and postpartum; Chinese society of Endocrinology, Chinese Medical Association; Chinese Society of Perinatology; Chinese Medical Association.*This table was translated from the original Chinese version to English version.* |

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| **Table 4. The recommended guideline for the management of Subclinical hypothyroidism, hypothyroidism, Positive thyroid autoantibodies**  |
| **SERIAL NUMBER** | **RECOMMENDATION** | **RECOMMENDATION STRENGTH** |
| **1** | **The reference range of related index of thyroid function during pregnancy** |  |
| 1.1 | For thyroid dysfunction diagnosis during pregnancy, the reference range of serum thyroid function indicators (TSH, FT4, TT4) specific for method and pregnancy (early, middle and third trimester) should be established in this unit or in this area. | Recommendation A |
| 1.2 | Adopt the method recommended by the American Institute of Clinical Biochemistry（NACB） to establish the reference range. Pregnant women with a moderate amount of iodine, singletons, previous thyroid diseases, negative thyroid autoantibodies and no goitre were selected. The reference range was 2.5 to 97.5 percentiles. | Recommendation A |
| **2** | **Clinical hypothyroidism during pregnancy (Hypothyroidism)** |  |
| 2.1 | The diagnostic criteria of clinical hypothyroidism during pregnancy are as follows: serum TSH > upper limit of the pregnancy-specific reference range, serum FT4 < lower limit of the pregnancy reference range. | Recommendation A |
| 2.2 | If the pregnancy-specific reference range of TSH cannot be obtained, the tangent point of the upper limit of TSH in early pregnancy can be obtained by the following two methods: the value obtained by reducing the upper limit of TSH reference range by 22% or 4.0 mU / L in the general population. | Recommendation B |
| 2.3 | During pregnancy, clinical hypothyroidism impairs the neurointellectual development of offspring and increases the risks of preterm delivery, abortion, low birth weight, stillbirth, and high blood pressure during pregnancy, which must be treated. | Recommendation A |
|  | **Treatment**The goal of treating clinical hypothyroidism in pregnancy is |  |
| 2.4 | During pregnancy, the treatment goal of clinical hypothyroidism is to control TSH at the lower 1 / 2 of the pregnancy-specific reference range. If the pregnancy-specific reference range cannot be obtained, the serum TSH can be controlled at 2. Less than 5mU / L. Once clinical hypothyroidism during pregnancy is diagnosed, treatment should be started immediately to achieve the above treatment goal as soon as possible. | Recommendation A |
| 2.5 | Clinical hypothyroidism during pregnancy was treated with LT4. There is no need for LT3 or dry thyroid tablets. | Recommendation A |
| 2.6 | After clinical hypothyroidism women are suspected or diagnosed with pregnancy, the replacement dose of LT4 needs to be increased by 20% to 30%. Adjust the dose of TSH in time according to the treatment target of serum LT4. | Recommendation A |
| 2.7 | Thyroid function was measured every 2 ~ 4 weeks in women with clinical hypothyroidism in the first half of pregnancy. When serum TSH is stable, it can be detected every 4 ~ 6 weeks. | Recommendation B |
| 2.8 | The postpartum dose of LT4 in pregnant women with clinical hypothyroidism should be adjusted to the pre-pregnancy level, and the thyroid gland function should be reexamined six weeks after delivery to guide the adjustment of LT4 dose. | Recommendation A |
| 2.9 | Women with clinical hypothyroidism need to adjust the dose of LT4 and control serum TSH level at the lower limit of the normal reference range ~ 2.5 mU / L before planning any pregnancy. | Recommendation A |
| **3** | **Subclinical hypothyroidism during pregnancy (SCH)** |  |
| 3.1 | The diagnostic criteria of pregnancy SCH are as follows: serum TSH > the upper limit of the pregnancy-specific reference range, and serum FT4 is within the reference range of pregnancy specificity. | Recommendation A |
| 3.2 | SCH during pregnancy chooses different treatment schemes for SCH during pregnancy according to the level of serum TSH and whether TPOAb is positive or not. | Recommendation I |
| a | TSH > the pregnancy-specific reference range upper limit (or 4. 0 mU / L), regardless of whether TPOAb is positive or not, LT4 treatment is recommended. | Recommendation B |
| b | TSH > 2.5mU / L and lower than the upper limit of the pregnancy-specific reference norm (or 4.0mU / L), with TPOAb positive, LT4 therapy should be considered. | Recommendation B |
| c  | TSH > 2.5mU / L and lower than the upper limit of the pregnancy-specific reference norm (or 4.0mU / L). TPOAb is negative. LT4 therapy is not considered. | Recommendation D |
| d | TSH < 2.5 mU / L and higher than the lower limit of pregnancy-specific reference norm (or 0.1 mU / L), is not recommended for LT4 therapy). When TPOAb is positive, TSH needs to be monitored. When TPOAb negative, no need for monitoring | Recommendation D |
| 3.3 | The therapeutic drugs, therapeutic targets and monitoring frequency of SCH during pregnancy are the same as those of clinical hypothyroidism during pregnancy. The therapeutic dose of LT4 may be less than that of clinical hypothyroidism during pregnancy. Different doses of LT4 can be given initial treatment according to the degree of TSH elevation. | Recommendation A |
| 3.4 | Postpartum withdrawal of LT4 may be considered in patients with SCH, diagnosed during pregnancy, and serum TSH levels can be evaluated six weeks after delivery. | Recommendation B |
| **4** | **Simple hypothyroidism during pregnancy** |  |
| 4.1 | When the level of serum FT4 is lower than the lower limit of the pregnancy-specific reference range and the serum TSH is normal, hypothyroidism can be diagnosed. | Recommendation A |
| 4.2 | There is insufficient evidence for LT4 intervention in uncomplicated hypothyroidism to improve adverse pregnancy outcome and neurointellectual development damage in offspring. This finger South neither recommends nor opposes LT4 treatment in early pregnancy. | Recommendation C |
| 4.3 | It is recommended to determine the causes of hypothyroidism, such as iron deficiency, iodine deficiency or iodine excess, and treat the causes. | Recommendation A |
| **5** | **Positive thyroid autoantibodies during pregnancy** |  |
| 5.1 | Positive thyroid autoantibodies mean that the titer of TPOAb or TgAb exceeds the upper limit of the reference range provided by the kit. Simple positive thyroid autoantibodies are not accompanied by abnormal serum TSH, which is also called positive thyroid autoantibodies in patients with normal thyroid function. | Recommendation A |
| 5.2 | Women with normal thyroid function and positive TPOAb or TgAb before pregnancy should be monitored for serum TSH, every four weeks to the end of the second trimester after a definite pregnancy. | Recommendation A |
| 5.3 | The use of LT4 in treating pregnant women with normal thyroid function, positive TPOAb and a history of unexplained abortion may be beneficial with low risk. It can be treated with LT4 at the beginning of 25 ~ 50 μ g / d. | Recommendation B |
| 5.4 | Selenium supplementation is not recommended for TPOAb positive women during pregnancy. | Recommendation D |
| **6** |  **Postpartum thyroiditis (PPT)** |  |
| 6.1 | PPT will be onset within one year after parturition. The typical cases experienced three stages, thyrotoxicosis, hypothyroidism and recovery. Atypical cases can only show thyrotoxicosis or hypothyroidism. Women with positive TPOAb in early pregnancy have an increased risk of developing PPT. | Recommendation A |
| 6.2 | All patients with depression, including postpartum depression, should be screened for thyroid function. | Recommendation B |
| 6.3 | Patients with PPT thyrotoxicosis are not treated with Antithyroid drugs (ATD). Beta-blockers can relieve symptoms, use the minimum dose and shorten the treatment course as much as possible. | Recommendation B |
| 6.4 | After the period of thyrotoxicosis, serum TSH should be reexamined every two months to detect hypothyroidism in time. | Recommendation B |
| 6.5 | LT4 treatment for Hypothyroidism in PPT. Serum TSH should be reexamined every 4-8 weeks until thyroid function normalise.  | Recommendation A |
| 6.6 | After continuous treatment for 6-12 months during Hypothyroidism, LT4 began to decrease gradually. If the patient needs breastfeeding at this time, do not reduce the dose of LT4. | Recommendation C |
| 6.7 | More than 20% of PPT patients will develop permanent hypothyroidism. Serum TSH needs to be tested every year after the onset of the disease. Early detection of permanent hypothyroidism and treatment is needed. | Recommendation B |
| **7** | **Thyrotoxicosis during pregnancy** |  |
| 7.1 | Serum TSH in early pregnancy is lower than the lower limit of the pregnancy-specific reference range (or 0.1 mU / L),) suggesting that there may be thyrotoxicosis. Medical history and physical examination should be asked in detail, and T4, T3, TRAb and TPOAb should be further determined. 131I uptake rate and radionuclide scanning are contraindicated. | Recommendation A |
| 7.2 | Serum TSH is lower than the lower limit of the pregnancy-specific reference range (or 0.1 mU / L), FT4 > the upper limit of the pregnancy-specific reference range). After excluding hyperthyroidism, Transient thyrotoxicosis of pregnancy（GTT) can be diagnosed. | Recommendation A |
| 7.3 | GTT is associated with a high level of hCG secreted by the placenta. Supportive therapy is the primary treatment to correct dehydration and electrolyte disturbance. ATD treatment is not recommended. If the condition requires, you can consider the use of β-receptor blockers. | Recommendation A |
| 7.4 | Women with hyperthyroidism due to Graves disease had better chances of getting pregnant after the thyroid gland function is controlled to normal and stable and reduces the negative outcome of pregnancy. | Recommendation A |
| 7.5 | Except for the rare case of simple fetal hyperthyroidism and the control of gestational hyperthyroidism, the combination of ATD and LT4 is not recommended. Because this will increase the therapeutic dose of ATD, leading to goitre and hypothyroidism in the fetus. | Recommendation D |
| 7.6 | Pregnant women who are taking Methimidazole（MMI） or Propylthiouracil（PTU) can suspend ATD and immediately test for thyroid function and thyroid autoantibodies if the pregnancy test is positive. Decide whether or not to use drugs according to clinical manifestations and FT4 level. | Recommendation A |
| a | Some patients can stop using ATD after the diagnosis of pregnancy is made. The decision to stop medication needs to consider medical history, goitre size, course of treatment, pre-pregnancy ATD dose, recent thyroid function results, TRAb levels and other clinical factors. | Recommendation C |
| b | After withdrawal, if the FT4 is normal or close to normal, you can continue to stop the drug. Clinical evaluation and detection of TSH, FT4 or TT4 and T3 were performed every 1 ~ 2 weeks. If FT4 remains normal, thyroid function can be monitored every 2-4 weeks in the middle and third trimester of pregnancy. According to the results of each evaluation, decide whether to continue to stop the drug for observation. | Recommendation C |
| c | In some patients, hyperthyroidism symptoms worsened, and the levels of FT4, TT4 and T3 increased significantly after drug withdrawal. It is suggested that ATD, should be given priority to choose between PTU and MMI as the second-line choice in early pregnancy. | Recommendation A |
| d | Pregnant women who used MMI in the past, if they need to continue treatment in the early stage of pregnancy, if they can use PTU, they should be converted to PTU as soon as possible. The dose conversion ratio of MMI to PTU is 1: (10 ~ 20). | Recommendation B |
| e | If you need to continue ATD treatment after the first trimester of pregnancy, it is not recommended whether to replace PTU with MMI in the second and third trimester of pregnancy. | Recommendation C |
| 7.7 | Serum FT4 / TT4 is the first choice for monitoring hyperthyroidism during pregnancy. The control goal is to use the minimum effective dose of PTU or MMI to make the serum FT4 / TT4 close to or slightly above the upper limit of the reference range. | Recommendation A |
| 7.8 | For women treated with ATD during pregnancy, it is recommended that FT4 or TT4, T3 and TSH should be tested every 1 ~ 2 weeks in the first trimester, every 2 ~ 4 weeks in the middle and third trimester of pregnancy, and every 4 ~ 6 weeks after reaching the target value. | Recommendation B |
| 7.9 | In principle, no operation should be taken to treat hyperthyroidism during pregnancy. If necessary, the best time for thyroidectomy is in the second trimester of pregnancy. | Recommendation A |
| 7.10 | Serum TRAb was detected in pregnant women with Graves disease who had been treated with radioactive iodine, surgery, or ATD in the early stage of pregnancy. | Recommendation A |
| A | If the serum TRAb is negative in the first trimester of pregnancy, there is no need to test again during pregnancy. | Recommendation B |
| B | If serum TRAb increases in the first trimester of pregnancy, it is recommended to detect it again at 18-22 weeks of pregnancy. | Recommendation A |
| C | If serum TRAb increases at 18-22 weeks of pregnancy or begins to use ATD, in the third trimester of pregnancy, it is necessary to detect serum TRAb, again to evaluate the necessity of fetal and neonatal monitoring. | Recommendation A |
| 7.11 | For pregnant women whose maternal hyperthyroidism can not be controlled or stored in high titer TRAb (3 times higher than the upper limit of the reference range) in the second half of pregnancy, fetal heart rate should be monitored from the second trimester, and fetal thyroid volume, growth and development, amniotic fluid volume and so on should be examined by ultrasound. The thyroid function of newborns with high-risk factors of hyperthyroidism should be closely monitored. | Recommendation A |
| 7.12 | Patients with hyperthyroidism who are breastfeeding should weigh the advantages and disadvantages of using ATD,. ATD should be taken after each lactation. | Recommendation C |
| **8** | **Iodine nutrition during pregnancy** |  |
| 8.1 | When evaluating iodine nutrition of pregnant women, the ratio of single Urinary iodine concentration（UIC） to urinary creatinine (μ g / g) was better than that of single UIC (μ g / L). | Recommendation B |
| 8.2 | At least 250μg of iodine daily for pregnant, pregnant and lactating women. | Recommendation A |
| 8.3 | Formulate different iodine supplement strategies according to different regions. In iodine deficiency areas, if you eat iodised salt every day, there is no need to supplement iodine during pregnancy. If you do not eat iodised salt, you need to supplement an additional 150μg of iodine every day during pregnancy. Potassium iodide is suitable for iodine supplement (or multivitamins containing the same amount of potassium iodide). The best time to start supplementation is at least three months before pregnancy. | Recommendation A |
| 8.4 | Daily iodine intake > 500 μ g during pregnancy and lactation is at risk of fetal hypothyroidism. | Recommendation C |
| **9** | **Thyroid nodules and thyroid carcinoma during pregnancy** |  |
| 9.1 | During pregnancy, patients with thyroid nodules should be asked for medical history in detail, physical examination should be improved, serum TSH should be determined, and neck ultrasound should be done. | Recommendation A |
| A | If the TSH level decreases and continues beyond 16 weeks of pregnancy, Fine needle aspiration (FNA) cytological examination of thyroid nodules may be postponed until postpartum. If postpartum TSH is still low, radionuclide scanning is feasible to evaluate thyroid nodule function without breastfeeding. | Recommendation C |
| B | If the TSH level is normal or elevated, FNA should be decided according to the sonographic characteristics of the nodules. | Recommendation A |
| 9.2 | FNA can be done during pregnancy. If the thyroid nodule is more likely to be benign, it can be postponed until postpartum. If the thyroid nodule cytology is benign, no special monitoring is required during pregnancy. | Recommendation A |
| 9.3 | Papillary thyroid carcinoma found in early pregnancy should be monitored by ultrasound, and thyroid ultrasound should be reexamined every three months to monitor the growth rate of the tumour. If the nodules remain stable in the second trimester or found in the second half of pregnancy, the surgery may be postponed until postpartum. | Recommendation C |
| 9.4 | Differentiated thyroid carcinoma (DTC) during pregnancy, with no operation in the early stage of pregnancy, should be reexamined by thyroid ultrasound every three months to monitor the growth rate of the tumour. The goal of LT4 treatment is to control the serum TSH level in the range of 0.3 ~ 2.0 mU / L. | Recommendation C |
| 9.5 | If DTC continues to increase 24-26 weeks after, or lymph node metastasis occurs, surgical treatment is recommended. | Recommendation B |
| 9.6 | The operation time of DTC should be in the second trimester of pregnancy. At this point, the risk of surgery to the mother and fetus is reduced. | Recommendation B |
| 9.7 | The effect of newly diagnosed medullary or undifferentiated carcinoma during pregnancy on pregnancy is not clear. However, delayed treatment is likely to lead to adverse outcomes. Therefore, after evaluating all clinical factors, surgical treatment should be performed. | Recommendation C |
| 9.8 | Patients with DTC should maintain the established goal of TSH inhibition after pregnancy. The serum TSH was detected regularly every 2 ~ 4 Mondays until the 20th week of pregnancy. When TSH is stable, it can be detected every 4 ~ 6 weeks. | Recommendation B |
| 9.9 | Women with a history of DTC treatment do not need an ultrasound and Tg monitoring during pregnancy if there is no evidence of structural abnormalities of the disease (whether there are suspicious cancer nodules on ultrasound) or biochemical (elevated Tg levels) before pregnancy. If thyroid cancer treatment is not effective, or if it is known to exist in recurrent or residual lesions, ultrasound and Tg monitoring should be performed during pregnancy. | Recommendation A |
| **10** | **Congenital Hypothyroidism (CH)** |  |
| 10.1 | Neonatal CH screening should be carried out at 72 h ~ 7 d after birth. The TSH tangent point of heel blood (dry bloodstain on filter paper) is 10 ~ 20 mU / L. | Recommendation A |
| 10.2 | Serum TSH, FT4 / TT4 was reexamined immediately in patients with positive screening. Local laboratories determine the diagnostic criteria according to the reference values of their laboratories. Serum TSH > 9 mU / L FT 4 < 0.6 ng / dl can be used as the diagnostic standard of CH. It still needs to be combined with the results of the etiological examination of CH. | Recommendation A |
| 10.3 | CH treatment should be started within two months after birth, and the earlier the prognosis is, the better. The treatment goal is to maintain the 1 / 2 level of serum TSH < 5 mU / L FT4 and TT4 in the reference range. | Recommendation A |
| **11** | **Screening of thyroid diseases during and before pregnancy** |  |
| 11.1 | In high-risk pregnancy screening, 30% ~ 80% of hyperthyroidism, subclinical hyperthyroidism, hypothyroidism, and SCH missed diagnosis. | Recommendation A |
| 11.2 | Cost-benefit analysis shows that screening the whole pregnant population is better than non-screening. | Recommendation B |
| 11.3 | According to the national conditions of our country (China), this guide supports qualified domestic hospitals and maternal and child health departments to carry out thyroid disease screening for women in early pregnancy. Serum TSH, FT4 and TPOAb were selected as screening indexes. The screening time is chosen before eight weeks of pregnancy. It is best to screen before pregnancy. | Recommendation B |
| **12** | **Infertility and assisted reproduction and thyroid diseases** |  |
| 12.1 | All women who are treated for infertility should monitor their serum TSH levels. | Recommendation B |
| 12.2 | For SCH infertile women with negative thyroid autoantibodies (who did not receive assisted reproduction), there is insufficient evidence that LT4 treatment increases the pregnancy rate. However, the application of LT4 can prevent the development of SCH to clinical hypothyroidism after pregnancy, and the risk of low-dose LT4 treatment is low. It is recommended to give LT4 treatment to infertile women with SCH, with an initial dose of 25 ~ 50 μ g / d. | Recommendation C |
| 12.3 | LT4 treatment is recommended for SCH women who receive assisted reproduction. The treatment target of TSH should be controlled below 2.5 mU / L. | Recommendation B |
| 12.4 | Because the thyroid gland function results obtained during controlled ovarian stimulation can not reflect the actual state of thyroid function, it is suggested that thyroid function should be tested 1 ~ 2 weeks before and 1 ~ 2 weeks after controlled ovarian stimulation. | Recommendation B |
| 12.5 | For women who successfully conceived by controlled superovulation, it is recommended to treat those with elevated TSH. If TSH increases slightly for non-pregnant women who are not pregnant after controlled superovulation, TSH should be monitored every 2 to 4 weeks. The thyroid function of these women may return to a normal level. | Recommendation B |
| 12.6 | For infertile women with normal thyroid function and TPOAb positive for assisted reproduction, there is insufficient evidence to improve the outcome of assisted reproduction with LT4. However, for infertile women who have a history of abortion or recurrent abortion and perform assisted reproduction, they should weigh the advantages and disadvantages while choosing LT4 treatment. The initial dose of LT4 is 25 ~ 50 μ g / d. | Recommendation C |
| **Rating of recommendation strength**: A. Highly recommended. The evidence confirms that there are more advantages than disadvantages in improving health outcomesB. Recommended. There is good evidence that improving health outcomes outweighs the disadvantagesC. Not recommended or opposed. Based on expert advice, or available evidence suggests that the pros and cons are closeD. Against recommendations. Because the evidence is not strong enough or does more harm than good for health outcomesE. Against recommendations. Lack of evidence, or poor quality of evidence, or contradictory evidence, cannot determine the pros and cons of health outcomesATD: Antithyroid drugΒ-blocker: Beta-blockerCH: Congenital HypothyroidismDTC: Differentiated thyroid carcinomaFT3: Free triiodothyronineFT4: Free thyroxineFNA: Fine needle aspirationGTT: Gestational transient thyrotoxicosishCG: Human chorionic gonadotropinLT4: LevothyroxineMMI: MethimazoleNACB: National Academic of Clinical BiochemistryPTU: PropylthiouracilSCH: Subclinical HypothyroidismT3: TriiodothyronineT4: TetraiodothyronineTg: ThyroglobulinTgAb: Thyroglobulin antibodyTPOAb: Thyroid perioxidase antibodyTRAb: TSH receptor antibodyTSH: Thyroid stimulating hormoneTT4: Total thyroxineUIC: Urinary iodine concentrationCopied from Guideline on diagnosis and management of thyroid disease during pregnancy and postpartum (2nd edition) Ad Hoc writing committee for guidelines on diagnosis and management of thyroid disease during pregnancy and postpartum; Chinese society of Endocrinology, Chinese Medical Association; Chinese Society of Perinatology; Chinese Medical Association.*This guideline is translated from original Chinese version to English version* |

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| Table 5. Incidence and characteristics outcome of pregnancies managed for thyroid dysfunction. |
| **Variables** | **Marginal****N (%)** | **Complication** |
|  |  | OR(95%CI) | P-value |
| Age | 724(100%) | 1.024(0.895-1.172) | 0.725 |
| Parity | 724(100%) | 1.090(0.528-2.252) | 0.815 |
| Gravida | 724(100%) | 1.368(1.028-1.821) | 0.032 |
| Gestational age | 724(100%) | 1.100(1.073-1.127) | 0.000 |
| **Groups** |  |  |  |
| G0 | 189(26.1%) | 1.005(0.398-2.533) | 0.992 |
| G1 | 276(38.1%) | 0.938(0.401-2.195) | 0.882 |
| G2 | 164(22.7%) | 2.009(0.693-5.823) | 0.199 |
| G3 | 95(13.1%) | Reference |
| **Thyroid dysfunction** |  |  |  |
| Subclinical hypothyroidism | 420(58.0%) | 0.882(0.182-4.281) | 0.876 |
| Hypothyroidism | 246(34.0%) | 0.798(0.163-3.912) | 0.781 |
| Hyperthyroidism | 32(4.4%) | 2.411(0.274-21.197) | 0.427 |
| Other thyroid dysfunction | 26(3.6%) | Reference |
| **Method of delivery** |  |  |  |
| Stillbirth/miscarriage | 7(1.0%) | - | - |
| Normal vagina delivery | 341 (47.1%) | 2.521(1.246-5.100) | 0.010 |
| Assisted delivery | 26(3.6%) | 4.102(0.785-21.426) | 0.094 |
| Caesarean section | 350(48.3%) | Reference |
| **Age groups** |  |  |  |
| 18-25 | 98(13.5%) | 1.661(0.220-12.523) | 0.622 |
| 26-34 | 511(70.6%) | 1.629(0.513-5.177) | 0.408 |
| ≥35 | 115(15.9%) | Reference |
| G0 (group 0) are those with history of thyroid dysfunction, G1(group 1) are those diagnose and managed at their first trimester, G2(group 2) are those diagnosed and managed at their second trimester, G3(group 3) are those diagnosed and managed at their third trimester. |
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| Table 6: Compared the relationship between groups and ages with various complications in Subclinical Hypothyroidism and Hypothyroidism. |
| **Complications** | **Subclinical Hypothyroidism****N=423** | **Hypothyroidism****N=247** |
|  | P-value (OR, 95%CI) | P-value(OR, 95%CI) |
| Gestational HTN |  |  |
| G0 | 0.970 | 1.000 |
| G1 | 0.763(0.735, 0.099-5.433) | 1.000(0.899) |
| G2 | 0.668(0.672, 0.110-4.123) | 0.998(33524750.08) |
| G3 | 0.659(0.640, 0.088-4.660) | 0.998(32789142.07) |
| Age | 0.390(1.066, 0.922-1.232) | 0.743(1.039, 0.828-1.304) |
| Preeclampsia/eclampsia |  |  |
| G0 | 0.838 | 0.883 |
| G1 | 0.760(0.645, 0.039-10.744) | 0.997 |
| G2 | 0.588(0.461, 0.028-7.603) | 0.418(0.302, 0.017-5.478) |
| G3 | 0.820(1.328, 0.115-15.280) | 0.997 |
| Age | 0.059(1.196, 0.993-1.441) | 0.145(0.668, 0.388-1.149) |
| Abortion(miscarriage) |  |  |
| G0 | 1.000 | 1.000 |
| G1 | 1.000(0.676) | 1.000(0.897) |
| G2 | 0.997(33808903.68) | 0.998(16547540.01) |
| G3 | 1.000(1.005) | 1.000(0.955) |
| Age | 0.018(1.459, 1.067-1.997) | 0.828(1.040, 0.733-1.474) |
| Preterm birth |  |  |
| G0 | 0.623 | 0.884 |
| G1 | 0.978(1.022, 0.218-4.780) | 0.792(0.795, 0.144-4.374) |
| G2 | 0.771(1.223, 0.314-4.760) | 0.709(0.726, 0.135-3.898) |
| G3 | 0.353(0.423, 0.069-2.601) | 0.445(0.453, 0.059-3.459) |
| Age | 0.429(1.045, 0.937-1.164) | 0.926(1.006, 0.893-1.132) |
| Intrauterine fetal demise |  |  |
| G0 | 1.000 | 0.366 |
| G1 | 0.997(11028140.22) | 0.224(0.200, 0.015-2.680) |
| G2 | 1.000(1.175) | 0.106(0.131, 0.011-1.539) |
| G3 | 1.000(1.007) | 0.314(0.276, 0.023-3.373) |
| Age | 0.136(1.424, 0.895-2.265) | 0.251(0.861, 0.667-1.112) |
| Intrauterine growth restriction |  |  |
| G0 | 0.261 | 0.222 |
| G1 | 0.965(0.940, 0.056-15.696) | 0.129(0.260, 0.046-1.478) |
| G2 | 0.249(3.480, 0.417-29.003) | 0.048(0.152, 0.024-0.981) |
| G3 | 0.805(0.703, 0.043-11.507) | 0.204(0.296, 0.045-1.936) |
| Age | 0.455(0.944, 0.813-1.097) | 0.829(0.982, 0.836-1.154) |
| N=Sample size, G0 (group 0) are those with history of thyroid dysfunction, G1(group 1) are those diagnose and managed at their first trimester, G2(group 2) are those diagnosed and managed at their second trimester, G3(group 3) are those diagnosed and managed at their third trimester. |