

Evidence based nursing care guidelines of adult patients with Hypothyroidism

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Abstract

Objective: Hypothyroidism is an endocrine disorder. In hypothyroidism patient has an underactive Thyroid ("hypo-" means "under" or "below normal"). In patients with hypothyroidism, the Thyroid does not make enough Thyroid hormone to keep the body maintain its normal balance. Common causes of hypothyroidism are autoimmune disease, surgical removal of the Thyroid, and radiation treatment. The objective of this literature review is to present the evidence based nursing practice for patients with hypothyroidism.

Methodology: The literature review was done from the period of January to November 2015 from various online databases such as PUBMED, CINAHL and Allied Health Literature. Key words used: 'Hypothyroidism', 'adults', and 'Nursing Care' using Boolean (AND, OR) words. The final reference list consists of 20 relevant articles ranging from 2010 to 2015, which include qualitative and quantitative researches, literature reviews, peer reviews, and index articles.

This CPG adheres to the 2010 AACE Protocol for Standardized Production of Clinical Practice Guidelines published in Endocrine Practice (5). This updated protocol describes a more transparent methodology of rating the clinical evidence and synthesizing recommendation grades. The protocol also stipulates a rigorous multilevel review process. The process was begun by developing an outline for reviewing the principal clinical aspects of hypothyroidism. Computerized and manual searches of the medical literature and various databases, primarily including Medline, were based on specific section titles, thereby avoiding inclusion of unnecessary detail and exclusion of important studies.

AACE, American Association of Clinical Endocrinologists; ATA, American Thyroid Association; CPG, Clinical Practice Guideline; RAI, radioactive iodine; T3, triiodothyronine; T4, thyroxine; TPOAb, anti-thyroid peroxidase antibodies; TRIAC, 3,5,3 α -triiodothyroacetic acid; TSH, thyrotropin; TSHRAb, TSH receptor antibodies.

Compilation of the bibliography was a continual and dynamic process. Once the principal clinical aspects of hypothyroidism were defined, questions were formulated with the intent to then develop recommendations that addressed these questions. The grading of recommendations was based on consensus among the authors. The final document was approved by the American Association of Clinical Endocrinologists (AACE) and American Thyroid Association (ATA), and was officially endorsed by the American Association of Diabetes Educators (AADE), American Association of Endocrine Surgeons (AAES), American Academy of Otolaryngology—Head

and Neck Surgery (AAOHNS), American College of Endocrinology (ACE), Italian Association of Clinical Endocrinologists (AME), American Society for Metabolic & Bariatric Surgery (ASMBS), The Endocrine Society of Australia (ESA), International Association of Endocrine Surgeons (IAES), Korean Thyroid Association (KTA), Latin American Thyroid Society (LATS), and Ukrainian Association of Endocrine Surgeons (UAES).

Results: The evidence based nursing suggests that nurses should monitor vital signs of patients with hypothyroidism because fluctuations in metabolic rate are exhibited by changes in blood pressure, heart rate, and body temperature. Also, nurses should watch for the reduction in symptoms related to hypothyroidism such as fatigue, constipation, cold intolerance, lethargy, depression, and menstrual irregularities, it demonstrate that patient is getting therapeutic effect from drug. Nursing intervention should also include watching for the symptoms of hyperthyroidism such as nervousness, insomnia, tachycardia, dysrhythmias, heat intolerance, chest pain, and diarrhea as these symptoms may indicate that the drug is at a toxic level. Moreover, evidence based nursing care recommends to monitor T3, T4, and TSH levels as these levels help determine the effectiveness of pharmacotherapy. Monitoring of blood glucose levels, especially in individuals with Diabetes Mellitus is important as hormone can increase metabolic rate, and glucose utilization may be altered. Most importantly, nurses should provide supportive nursing care to cope with symptoms of hypothyroidism such as constipation, cold intolerance, and fatigue until drug has achieved therapeutic effects as it will decrease the client's anxiety, which will promote healing and compliance. Nursing intervention also includes monitor weight once a week as weight loss is expected because of increased metabolic rate as these changes help determine the effectiveness of drug therapy. Furthermore, nurses should monitor patients for signs of decreased compliance with therapeutic regimen as it may require early intervention and education about the medical regimen and the disease process.

Conclusion: Evaluation of the effectiveness of drug therapy is an important task for nurses in order to confirm that patient goals and expected outcomes have been met. These outcomes include the patient's Thyroid hormone levels are normal, the patient demonstrates decreased symptoms of hypothyroidism, the patient is free from significant adverse effects from drug therapy. And the patient demonstrates an understanding of the drug's action by accurately describing drug side effects and precautions.