

Types of medical research

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According to the Source of Data

Primary Research	Secondary Research
<ul style="list-style-type: none">• Original Data• Information appear for the first time	<p>Summary/ collation and/or synthesis of existing research</p> <p>Use existing data from Primary Sources</p>

According to the Source of Data

Primary Research

Intravenous Caffeine for the Treatment of Acute Migraine: A Pilot Study

Alireza Baratloo, MD,¹ Ahmed Negida,² Gehad El Ashal,³ and Nazanin Behnaz, MD⁴

Background: Caffeine has a long profile of use as an adjuvant therapy for headache and migraine. This study evaluates the safety and efficacy of intravenous caffeine citrate for patients with acute migraine headache.

Methods: In this single arm study, 61 patients were enrolled who were diagnosed with migraine according to International Headache Society criteria. Patients received 60 mg caffeine citrate intravenously (i.v.) in about 10 min. Visual analog scale (VAS) pain scores were measured on baseline and 1 h and 2 h after caffeine infusion.

Results: The improvement in VAS pain score was >3 point change from baseline to 1 h after i.v. infusion ($p < 0.001$) and >5 point change from baseline to 2 h after i.v. infusion ($p < 0.001$). Patients who received other medication before caffeine i.v. infusion did not show better improvement after 1 h ($p = 0.304$) or 2 h

According to the Source of Data

Secondary Research

Clin Auton Res. 2016 Jun;26(3):171-80. doi: 10.1007/s10286-016-0349-7. Epub 2016 Mar 7.

Meta-analysis of the safety and efficacy of droxidopa for neurogenic orthostatic hypotension.

[Elgebaly A](#)¹, [Abdelazeim B](#)^{2,3}, [Mattar O](#)^{2,3}, [Gadelkarim M](#)^{4,5}, [Salah R](#)^{5,6}, [Negida A](#)^{7,8,9,10}.

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Abstract

PURPOSE: Droxidopa has been approved for the treatment of neurogenic orthostatic hypotension (NOH) under the US Food and Drug Administration accelerated approval program, which warrants confirmatory evidence on long-term efficacy of droxidopa. Hereby, we synthesize evidence from published randomized controlled trials (RCTs) about the safety and efficacy of droxidopa for patients with neurogenic orthostatic hypotension.

METHODS: A computer literature search of PubMed, Scopus, Web of Science, and Cochrane Central was conducted using relevant keywords. Records were screened for eligible studies and data were extracted and synthesized using Review Manager version 5.3 for Windows. Subgroup analysis and sensitivity analysis were conducted to investigate long-term durability of droxidopa against placebo.

RESULTS: Four RCTs with a total of 485 patients (droxidopa, n = 246; placebo, n = 239) were eligible for the final analysis. The mean difference (MD) of change in the main outcomes from baseline to endpoint favored droxidopa than placebo [Orthostatic Hypotension Questionnaire (OHQ)

Clinical Research	Basic Science Research
<p>Requires Patients + patient data</p> <p>Deals with Patients</p>	<p>Test Tube Research Requires Prepared Labs</p> <p>Studies fundamental functions in biology</p> <p>May involve: Animal Models, Tissue Culture</p> <ul style="list-style-type: none">• Molecular Mechanisms• Cell Cycle• Receptors• Genes
<p>Has Clinical Relevance</p>	<p>Usually has more weight Generate More Knowledge Does not have direct clinical relevance</p>

Translational Research

Bridging the Gaps

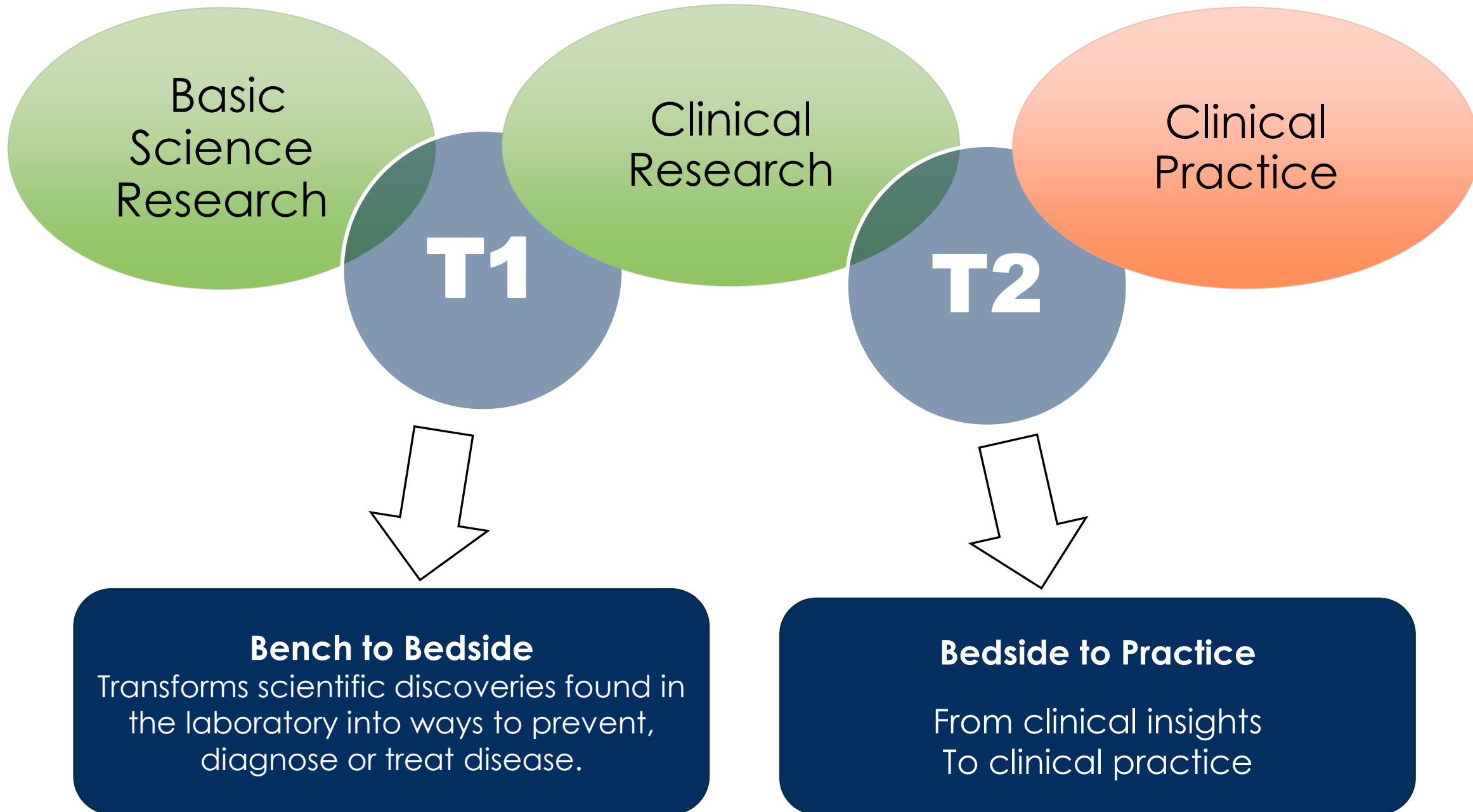
Basic
Science
Research

T1

Clinical
Research

T2

Clinical
Practice



Thank You !

The background is a solid blue gradient. In the bottom right corner, there are several white diagonal lines of varying lengths and thicknesses, creating a sense of motion or a stylized graphic element.