



significantly ($p < 0.001$) higher than in patients with AH without DM2. It was also found that the levels of proinflammatory cytokine TNF- α were significantly ($p < 0.01$) increased with body mass index (BMI) growth: from 170.712 ± 5.312 pg/ml at normal body weight to 194.285 ± 5.519 pg/ml at overweight and obesity grade I. Similar to changes in TNF- α concentrations, an increase in IL-6 levels with increasing BMI was also found. These changes can also be explained by the increase in production of IL-6 adipocytes in obesity. In patients with AH in the absence of DM2 similar changes in the values of TNF- α and IL-6 with increasing BMI were established, as in patients with comorbidity of AH and DM2. The levels of TNF- α and IL-6 in patients with AH and DM2 were significantly ($p < 0.001$) higher than in AH without the comorbidity.

Conclusions: On the basis of the analysis, the relationship between cytokine levels and the development of IR in AH was revealed. The obtained data can be explained by the fact that these cytokines affect different links of the formation of IR. Patients with AH and concomitant DM2 are characterized by a significant increase in TNF- α and IL-6 levels, the degree of which is correlated with BMI.

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**USING OF CAYENNE PEPPER “SHOMBO” TO TREAT HYPERTENSION
AND HIGH CHOLESTEROL LEVEL IN PATIENTS WITH OBESITY:
A NIGERIAN HERBAL MEDICINE EXPERIENCE**

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Introduction: Cayenne pepper is popularly known as “Shombo” in Nigeria and it is a common household spice that adds additional flavor to dishes. For at least 9,000 years cayenne pepper has been used both as food and medication. It has powerful detoxifying properties; boosts the circulation of blood to all parts of the body. Capsaicin is the substance in cayenne pepper that makes it “hot.” The traditional uses or phytochemical properties of capsaicin from many literature reviews are described as antibacterial, antidiabetic, antihypertensive, anti-inflammation, antioxidant activities. Moreover, it



can be used for the treatment of cardiovascular diseases. Researches indicate that patients with concomitant high blood pressure (HBP) and hyperlipidemia have a bigger additive risk of cardiovascular diseases which is the major cause of death in obese patients compared with patients who have either condition in isolation.

Aim of the Research: This research is therefore aimed to discuss the utilization of cayenne pepper to treat HBP and hyperlipidemia coexisting with obesity in Nigerian patients.

Materials and Methods: Study was performed on 25 randomly selected individuals of both sexes, (mean age 55.7 ± 5.3 years, mean BMI 27.5 ± 2.5 kg/m²), with obesity coexisting with high blood pressure and hyperlipidemia for 10 years (Group A). The place of the trial was Maitama General Hospital, Abuja, Nigeria. 15 patients suffering from hypertension were obese and the other 10 had increased cholesterol level alongside increased body weight. Patients used antihypertensive drugs (beta-blockers, calcium channel blockers, diuretics) and statins. A significant quantity of Shombo was combined daily in their lunch for 12 weeks, and all the participants were closely monitored for any response or adverse effects of the therapy. 30 patients with obesity coexisting with high blood pressure and hyperlipidemia also received similar therapy but without Shombo formed a comparison group (Group B).

Results: The findings of this study after 12 weeks of daily ingestion caused a reduction in abdominal fat, 3.1 kg of body weight and a reduction in systolic blood pressure of 4.44 mmHg and in diastolic blood pressure of 3.57 mmHg in the patients group A and in comparison with group B. Some of the patients showed a slight decrease in body weight as well as lowered plasma glucose concentrations and increased plasma insulin concentrations. In persons who lost more than 5 kg (8 persons in group A), the reduction in systolic blood pressure was 6.63 mmHg, and the reduction in diastolic blood pressure was 5.12 mmHg. These patients also showed significantly lowered total cholesterol (0.3 ± 0.08 mmol/l) and LDL-Cholesterol levels (0.2 ± 0.06 mmol/l). There were no changes in the cholesterol level in patients from group B. Patients from group A reported that the intake of red pepper increases satiety and the feeling of fullness and inhibits overeating and the desire to eat. Additionally, none of the patients developed



any unfavourable effects. This study indicates that red pepper and its bioactive compound capsaicin has shown potential property as antiobesity substance. Chilli pepper is probably one of the fastest acting supplement to decrease blood pressure, but also probably the least liked remedy used due to its “hot” effect. It is a natural vasodilator, which opens up the blood vessels and improves the overall circulation of energy throughout the body thus decreasing blood pressure. Moreover, red pepper possesses beneficial antihyperlipidemic effect. The antiobesity attribute of chilli pepper shows that its efficacy was partially the same as some antiobesity medications. Conclusion: So we have concluded that Shombo has beneficial effect on obesity and could reduce the risk of mortality due to cardiovascular diseases, but further clinical studies still needs to be carried out to confirm the full potential of this therapy.

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A CLINICAL CASE OF COMPLICATED HYPERTENSIVE CRISIS WITH AN ATYPICAL COURSE

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The correct diagnosis is often difficult, especially when the patient enters the non-core department with an atypical course of the main disease.

Often this situation can be met if the patient has an adjacent pathology of two or more organs or systems, for example, cardiology and / or pulmonology and / or cardiology and neurology, etc. It is important for the doctor to find out the prevailing system, which is a threatening condition of the patient and can greatly affect the forecast. As well as similar diagnostic and therapeutic difficulties may arise in case of complications of the underlying disease. For example, arterial hypertension can lead to a hypertensive crisis, which, in turn, can provoke a number of complications that threaten the patient's life (heart attacks, strokes, pulmonary edema, bleeding). Therefore, in medicine it is important to use an approach that focuses on the individual